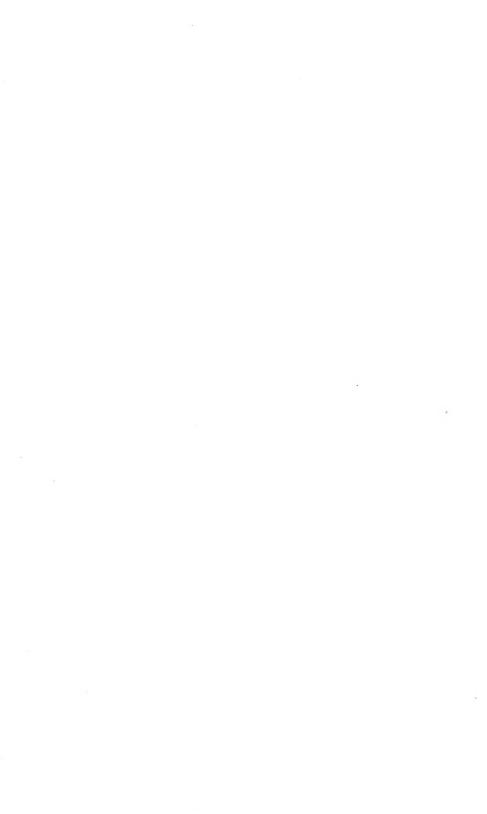


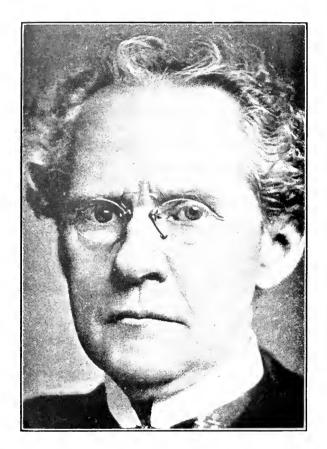
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THOMAS DOLAN.

### BULLETIN

OF THE

### National Association

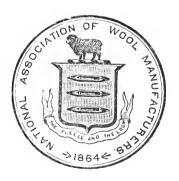
OF

## WOOL MANUFACTURERS,

1914.

FOUNDED NOV. 30, 1864.

EDITED BY WINTHROP L. MARVIN, Secretary.



VOLUME XLIV.

BOSTON, MASS. 1914. 116

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#### BULLETIN

OF THE

## National Association of Wool Manufacturers

#### A QUARTERLY MAGAZINE

DEVOTED TO THE INTERESTS OF THE NATIONAL WOOL INDUSTRY.

Vol. XLIV.] BOSTON, DECEMBER, 1913-JANUARY, 1914. [No. I.

#### ANNUAL WOOL REVIEW

FOR 1913

WITH ESTIMATE OF DOMESTIC WOOL CLIP OF 1913 AND OTHER STATISTICAL TABLES.

In the pages which follow we present for the twenty-fifth consecutive year our annual estimate of the domestic wool product based upon the number of sheep fit for shearing April 1, 1913, together with numerous tables relating to sheep in various countries, the wool product, and the manufactures of wool and their importation. We have followed our accustomed lines in gathering information, and desire to acknowledge our indebtedness for valuable assistance to sheepmen and others who have responded to our inquiries with helpful answers. We have no prose to serve except to secure the most accurate information possible under prevailing conditions; and in this effort due consideration has been given to the views of the best informed woolgrowers, wool buyers, and dealers, and to the reports of officials in States where sheep are assessed for taxation.

The year 1913 is one likely long to be remembered both by those engaged in the growing and by those engaged in the manufacture of wool in America. It marked on December 1, in accord with provisions of the new Simmons-Underwood tariff law enacted on October 3, a complete abandonment of protective duties on raw wool, and the placing of wool upon the free list. In this particular the new tariff law has proved even more radical than the Underwood wool and woolen bills of 1911 and 1912,

which, though passed by Congress, were vetoed by President Taft. In those measures Chairman Underwood and his colleagues proposed a duty of 20 per cent on raw wool, and 29 per cent was granted in the compromise La Follette-Underwood bills as passed and vetoed. The placing of wool on the free list in the tariff bill of April, 1913, was an afterthought due to the personal intervention of President Wilson, who will be regarded as peculiarly responsible for the consequences. Chairman Underwood had contemplated a duty of 15 per cent.

But while raw wool is duty free in the new tariff law, mohair—the hair of the Angora goat—and alpaca, which had long been classed with wool, were left dutiable at 15 per cent in response to the demand of Southwestern goat growers, who developed much influence in the Committee on Ways and Means and the House of Representatives.

Free wool was not asked for from Congress by any manufacturers. It was not advocated by any persons who professed to speak for manufacturers. The National Association of Wool Manufacturers, in its formal memorial presented to Congress by its President, made no suggestion whatever as to raw wool but limited its recommendations wholly to manufactured goods. It is important that these facts should be recorded and remembered. Free wool was urged by, and adopted on the initiative of, the President of the United States, whose party associates accepted his views and followed his leadership. It is a party policy for which the Administration and its adherents in Congress are directly and exclusively responsible.

The placing of raw wool on the free list on December 1 by the new tariff law was followed by the reduction of all duties on wool manufactures, which took effect on January 1, 1914—the new rates on cloths and dress goods being 35 per cent ad valorem, as compared with 40 and 50 per cent in the Gorman-Wilson tariff law of 1894, in which also raw wool was free of duty.

These radical changes became known in April of the past year, for the first time, although the fact that some changes were inevitable had been apparent ever since the election of Mr. Wilson and the sweeping victory of his party in November, 1912. The summer of 1913 naturally proved an unfavorable period for wool growing and wool manufacturing, and a continuance of the general depression in the wool growing industry that began to manifest itself in 1911 was a purely natural outcome.

A great strike of the garment workers in New York and neighboring centers, assuming serious proportions early in 1913, inevitably lessened the production of woolen goods, and had an unfortunate effect upon the wool market already unsettled by the approach of a special session of an anti-protectionist Congress. Later on, the reporting in the House of the new authoritative Underwood tariff bill, with raw wool on the free list instead of dutiable at 15 per cent as had been anticipated, proved a staggering blow to the wool industry all over the United States. For a time, there were those here and there — the wish being father to the thought — who contended that free wool could not possibly be agreed to by the Senate. But when the Democratic Senatorial cancus voted for free wool, forty to six, all hope was abandoned, values fell and presently domestic wools were recognized as being practically on a free trade basis. From time to time small exports were made to foreign manufacturers who wished to test the spinning qualities of American wools with which they had long been unfamiliar, but this never amounted to anything more than a trivial, experimental business.

The long summer's delay in the consideration and passage of the tariff bill discouraged manufacturing and kept the wool trade in a hesitant and uncomfortable mood, but early in September, when the main provisions of the woolen schedule came to be regarded as reasonably fixed and certain, an increased activity was felt among the mills. Customers who had waited long were now compelled to place their orders, and machinery long idle was again in operation, although neither then nor later was the industry as a whole running to anything like its full, normal capacity. With the mills thus active, relatively large purchases of domestic wools were made, on prices adjusted to the selling of the finished goods on the reduced-duty basis after January 1.

But the tariff agitation, culminating in free wool, was by no means the only factor operating to discourage wool growing in America. The extension of the forest reserve policy, narrowing the area of open ranges, is mentioned by many of our Western correspondents as a constant influence to reduce the number of sheep and the production of wool. Moreover, homesteads were being established in the range country, and the pastures of the flocks were being utilized for general farming purposes. In a famous wool producing State like Michigan, more and more land

has been devoted of late years to beet sugar, vegetables, fruits, and dairying. It cannot but be recognized that, free wool or no free wool, some of these other causes would have been and will be in operation. Moreover, there is that strong, characteristic tendency almost everywhere to cross for mutton sheep and half bloods—to regard the meat as the main and the wool as the incidental object of the sheep raising industry.

Now that we are again on a free wool basis, it is worth while to review briefly the course of wool production in America, since the previous free wool experiment in the Gorman-Wilson law of 1894. Under the McKinley tariff law of 1890, the American wool production was steadily increasing. It had reached 348,538,-738 pounds in the year 1894. Then came free wool, and by 1897, the last year of the Gorman-Wilson period, the American wool production had dropped to 272,478,708 pounds, a loss in three years of more than 20 per cent. Nor did it cease falling off in the first years of the Dingley tariff of 1897, by which the wool duties were restored. The reason for this is manifest in the immense importations of foreign wools — 350,852,026 pounds rushed in in 1897, in anticipation of removal from the free list, and in very heavy importations of foreign woolen fabrics at the same time. For the time being the American market was inundated with foreign wool and foreign goods, but by 1900 the American wool production was again increasing. By 1901 it was 288,636,621 pounds, and except in the one year 1904 it did not fall below that figure but tended to increase, attaining 311.138.321 pounds in 1909, the year of the enactment of the Aldrich-Payne tariff law, and 328,110,749 pounds in 1910. In that year the protectionist party was defeated in the Congressional elections and lost control of the House of Representatives. radical reduction of the wool duties was immediately promised by Mr. Underwood and his colleagues and proposed in the spring of 1911, in which year the American wool production fell off to 321,362,730 pounds. It fell again to 318,547,900 pounds in 1912, and to 304,043,400 pounds in 1913.

In a similar way, the number of sheep in this country has been decreasing. There were, according to our figures, 41,999,500 sheep fit for shearing on April 1, 1910; on the same date in 1911 there were 39,761,000; on April 1, 1912, there were 38,481,000.

#### THE NUMBER OF SHEEP.

We place the number of sheep fit for shearing on April 1, 1913, as shown in Table I., at 36,319,000, a decrease of 2,162,000 from the 1912 statement.

The actual decrease in the flocks is much larger than these figures indicate. More exact information has shown that the number of sheep in certain of the extreme Western States was understated in our last report.

As compared with that report the decrease is 1,320,000 in the Western group of States, where the winter caused many severe losses in the flocks.

The forest reserve policy and closer settlement have operated further to restrict the sheep ranges and reduce the acreage available for pasturage.

In the Eastern section of the country the decrease appears as 832,000 head. Dairying, fruit-raising, and other agricultural pursuits, where the money returns are more frequent and the labor less exacting, have an ever increasing influence toward the reduction of the flocks. The Southern group remains nearly stationary, the apparent loss being only 10,000.

Anticipated reduction in the wool duties has also been a forceful factor and caused the sending of many sheep to the block. At the same time the high price of meat has sent many lambs, especially of the mutton breeds, to the market.

Our correspondence indicates a great degree of discouragement among wool growers and a general belief that under free wool it will be impossible for them to continue in the business. They manifest, however, a disposition to hold on as long as possible in the hope of a change in the law, whereby a duty may be restored. There is also a marked tendency towards the production of sheep of the mutton breeds, which will result, so far as it proceeds, in making wool a secondary instead of a primary product.

#### THE WOOL PRODUCT OF 1913.

Our estimate for the total clip, exclusive of pulled wool, for the present year is 252,675,300 pounds, a decrease of 9,868,100 pounds from our last year's estimate. The scoured equivalent is 100,267,080 pounds, a decrease of 6,299,572 pounds from last year.

Returns from several of the great wool producing States and railroad reports from the principal shipping points indicate that the figures given a year ago for the estimated production were considerably under the actual quantity produced or that wool had previously been withheld from the market. In consequence the estimates for this year which are believed to be as near the truth as possible, pending the receipt of data which will not be available for some weeks, do not show so large a decrease when compared with last year's figures, as the general opinion of the trade seems to demand.

The detailed statement, by States, of the estimated number of wool bearing sheep; weight of fleece with percentage of shrinkage of the wool as sheared, to its equivalent in secured wool; the average value per pound for five years and the total value of this year's clip, including pulled wool, will be found in Table I. opposite.

In this table for convenience the States are arranged, as in years past, in three groups, the first embracing all those north of the Ohio River and east of the western boundary of Missouri, including Kentucky, Maryland, and West Virginia, in which the fleece wools, fine and medium, are of comparatively light weight and shrinkage; the second comprising, with the exception of Texas, the southern States where only medium wools are grown, and the third, all the States west of the Missouri line, including Texas, New Mexico, and Arizona. The majority of the fine, fine medium, and medium wools of heavy weight and shrinkage are produced in this section.

In the first group there are 11,009,000 sheep, equal to 30 per cent of the total flock, which produced 71,727,300 pounds of wool, equal to 28.4 per cent of the whole product of 252,675,300 pounds of wool in the grease, excluding pulled wools.

In the third section are 23,440,000 sheep, or 64.5 per cent of the total flock, which produced 173,558,250 pounds of wool, or 68.6 per cent of the total clip. In scoured condition the wools of the first group yielded 37,011,997 pounds, or 37 per cent of the total, while the third group produced 58,776,453 pounds, or 58.6 per cent of the whole.

#### Pulled Wool.

We increase our estimated production of pulled wool for this year to 43,500,000 grease pounds, an excess of 2,000,000 pounds over our total for 1912. This increase is based upon actual returns from slaughtering centers, and is the natural consequence

TABLE 1. WOOL PRODUCT OF THE UNITED STATES. - 1913.

April   1912   1913   1914   1915	States and Territories.	Quality.	National Association's Estimate, Number of Sheep of Shearing Age,	Average Weight of Fleece,	Wool Washed and Unwashed,	Per cent of Shrinkage,	Equivalent Quantity of	Average V	uluc per Sco (ict. 1.	ured Found,	Total Value, 1913.	
me 107, fm. 907, medium 126,000 0.25 997,500 42 913,750 40 0.1 39 8312,003 Maine, minuted 25,000 0.55 215,000 45 113,500 40 0.1 39 8312,003 Maine, minuted Medium 25,000 0.55 215,000 45 113,500 40 21 32 32 37 0,438 Members, minuted Medium 25,000 0.50 118,750 42 12.52 32 37 0,438 Members, minuted Medium 550,000 0.50 30,000 12 118,750 42 22 37 0,438 Members, minuted Medium 150,000 0.50 0.50 0.00 30,000 12 118,750 42 22 37 0,438 Members, minuted Medium 150,000 0.50 0.50 0.00 30,000 12 118,750 42 22 37 0,438 Members, minuted Medium 150,000 0.50 0.50 0.50 0.00 0.00 0.00 0.0	States and Territories.	- Carrier	April 1, 1913.	1913.	1913.	1913.		1911.	1912.	1913.	Total Value, 1913.	States and Territori
Second   197, Eug. 1997, and submare   126,1000   6.25   937,500   12   5.34,750   10   51   39   \$212,003   Nation.   Second   12   Second   12   Second   13   Second					Pounds.		Pounds.	Cents.	Cents.	Cents		
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Section   Sect	Hampsinte 20	% · · 80% · · · · · · · · · · · · · · · · · · ·	85,000	6.75	573,750	50		44				
de Jeland	Monte	/// edinm	23,000	6.25		42						
15,000   570   85,500   42   19,500   43   23   37   18,348   Connected   CVs.   50,001   6,500   6,	sacinisetts		5.000	6.00								
Yerk				5.70								
Jersey   Medium   17,000   5.00   91,800   16   49,572   18   5.2   28   18,877   New Jersey   18,878   18,879   18,87	necticut											
nerlyania   Off_ fine_stry_medium   G48,90   6.50   4,221,000   48   2,109,240   46   54   44   955,700   Penngtron   Medium   5,000   5.50   25,600   41   14,400   40   53   56   5,341   5,400   5,500   5,	YORK	diam.										
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Cureina	ware M	40um										
ueky Melma		, the contract of the contract										
1.		% fine, 25% medium										West Virginia.
1	neky M	alium									853,461	Kentucky.
igan   152%   157%   1500,000   1,00		% fine, 35% medium								48	3,588,000	
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Second   S	0014111	N 11 81197										
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11,00,000		70 1176										
150,000   150,	ouri 12	7							. 55	- 38		Missouri.
Carolina   150,000   3.75   562,500   42   220,250   41   48   38   123,975   North Car Carolina   39,000   3.60   108,000   42   62,644   40   50   38   23,853   Sott Cardina   175,000   3.50   612,550   42   55,250   40   53   39   133,548   Georgia   15,000   3.25   373,750   38   231,725   40   50   38   88,955   38,955							37,011,997				\$15,388,234	
16 Carolina   150,000   3.55   552,500   42   32c,250   41   48   38   123,975   North Car gia   175,000   3.50   612,500   42   555,250   40   50   38   23,863   Suth Car gia   175,000   3.50   612,500   42   555,250   40   50   38   75,570   For its and the state of the state	inia M	dium					1.281,600	4.5	56	39	\$499,824	Varginia.
Carolina   39,000   3.60   108,000   42   62,640   40   50   38   23,803   83   175,000   3.60   109,000   3.25   355,050   40   53   39   135,548   60   109,000   3.25   325,000   38   201,500   40   50   38   70,570   100,000   3.25   325,000   38   231,725   40   50   38   85,656   40   40   40   40   40   40   40   4		**	150,000	3.75	562,500	42	326,250	41	48	38	123.975	North Carolina.
en   175,000   3.50   612,500   42   355,250   40   53   39   135,548   Georgian   325,000   38   201,500   40   50   38   76,570   Forfat   325,000   38   201,500   40   50   38   76,570   Forfat   325,000   325   337,370   38   231,725   40   50   38   330,388   388,935   389,935   330,389   3		**	30,000	3.60	108.000	4.2		40	50			South Carolina.
100,000   3.25   335,000   38   201,130   40   50   38   76,570   100,000   3.25   335,000   38   201,130   40   50   38   76,570   40   50   38   85,055   Albana   50,000   3.55   502,560   39   343,125   40   50   38   130,388   130,388   140,000   3.50   400,000   38   303,800   40   50   38   130,388   130,388   130,000   40   400,000   40   40   400,000   40   4												
115,000												
1890   1890												
Same	ama	Committee Control Control Control Control										
100,000   4   10   400,000   40   240,000   40   49   36   86,400   Arkansas.   45,000   4   20   1,935,400   42   1,132,740   42   53   39   411.769   Tennessee   1,870,000   3.95   7,389,750   39   4.478,650   81,224,877   48   829,818   Kansas.   48   48   48   48   48   48   48   4												
1,870,000   3.95   7,389,750   39   4,475,650   39   4,475,650   38   4,248,877   39   4,475,650   39   4,												
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							496,125	50				Kansas.
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$												Nebraska.
1   1   1   2   2   2   2   2   3   4   2   2   4   4   2   2   4   4   4			459,000					52		46		South Dakota.
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			240,000	7,103	1,680,000	62			57	46	294,664	North Dakota.
ang 3,600,600 8,30 22,850,000 87 9,222,850 52 56 14 1,075,632 Wyoning 1,200,000 7,50 1,200,000 7,50 1,220,000 87 1,230,000 87 1,230,000 87 1,230,000 87 1,230,000 87 1,230,000 87 1,230,000 87 1,230,000 88 50 1,130,000 88 50												
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	rnu	7, rau, 6/7, spring										
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175,000   1,50   1,70												
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$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			775,000	6.50			1,712,750	50		48		Arizona.
25, fall, 52% spring. 1,350,000 6 50 8,775,000 66 2,085,500 52 57 44 1312,740 Texas, coma and Indian Territory Fine, fine used, and medium 55,000 6 50 83,988 Oklahoma 23,440,000 7 40 173,558,250 66 4 58,776,453 \$26,671,943 \$	Mexico	1	2,700,000	6.50	17,550,000	65		48		44		New Mexico.
oms and Infian Territory   Fine, fine nied and medium   55,090   6.50   337,550   67   117,975   45   55   50   58,988   Oklahoma   23,440,000   7.40   173,558,250   66.4   58,775,453   \$256,671,943   \$256,671,943   \$36,319,000   6.95   252,675,300   60   109,267,080   47.7   55.2   43.6   \$43,785,054   Totals, d Wood   47.5   56   43.4   13,797,300   Pulled Wood   47.5   47.6   47.7	25	5. fall, 75% spring				66			57		1,312,740	
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s				7.40		66.4					\$26,671,943	
d Ward 43,560,000 27 31,755,000 47.5 56 43.4 13,797,900 Pulled W.	-		' ' ' - '						55.0	1200		Totals
												Pulled Wool.
1 Product, 1913							132,022,080	47.7	55.2	43.6	\$57,582,954	Total Product,

of the reduction in flocks especially in the territorial districts. The shrinkage from the brushed to the scoured state is placed at the same figure as last year, namely, 27 per cent, which makes the scoured equivalent 31,755,000 pounds. This quantity may be divided as follows:

Fine and fine medium	17,600,000 pounds.
Medium and coarse	14,155,000 "

These quantities may be subdivided into the current market grades with average values for each based on the price October 1, as follows:

	Pounds Scoured.	Value per pound, cents.	Total value.
Extra and fine A	4,200,000	52	\$2,184,000
A super	8,400,000	47	3,948,000
B super	6,300,000	38	2,394,000
C and low super	1,550,000	33	511,500
Fine combing	5,500,000	45	<b>2</b> ,475,000
Medium combing	3,250,000	42	1,365,000
Low combing	2,050,000	38	779,000
Shearlings	505,000	28	141,400
	31,755,000	Average 43.45	\$13,797,900

The total wool production of the country, both sheared and pulled, is placed at 296,175,300 pounds, or 7,868,100 pounds less than the estimated product of last year, and is equal to 132,020,080 pounds of scoured wool.

#### WEIGHT AND SHRINKAGE.

For a series of years the average weight and shrinkage for the whole country have been as follows:

	Average Weight.	Average Shrinkage
	Pounds.	Per cent.
1901	6.33	60.6
[902	6.50	60.0
903	6.25	60.8
904	6.50	61.6
905	6.56	61.3
906	6.66	61.8
907	6.60	60.6
908	6.70	60.5
909	6.80	60.9
910	6.70	60.0
911	6.98	60.4
912	6.82	59.3
913	6.95	60.0

The wool came to market this year generally in good condition, as is shown both in the average weight per fleece and in the average shrinkage in cleansing, the average yield of clean wool per pound being practically the same as in the other years shown in the above table, and equals 40 pounds to the hundred.

#### VALUE OF THE CLIP.

The gross value of the wool product, both fleece and pulled, for the year, based on its scoured value in Boston in the early days of October, is as follows:

Fleece wool	4
Pulled wool	0(
	_
Total	)4

This is a decrease of \$18,236,267 from the corresponding value for last year, and means a very serious loss to the wool growing interests.

In the first group of States, as arranged in the table, the wools were worth \$15,388,234, or 35 per cent of the total value of the fleece wool. The second group produced wool to the value of \$1,724,877, or nearly 4 per cent of the total, while in the third

group the value is \$26,671,943, or 61 per cent of the whole. These ratios are essentially the same as in the preceding year, the decrease in number of pounds produced and the increased value balancing each other so far as relative proportions are concerned.

The next table (No. II.) presents a statement of the production of wool for a period of twenty-five years with the annual increase or decrease, and the one following it (No. III.) gives the production for the same period reduced to the scoured equivalent, as shown in our yearly estimates.

TABLE II. - FLEECE AND PULLED WOOL, WASHED AND IN THE GREASE.

	Product.	Decrease.	Increase.
889 pounds	295,779,479	6,096,642	
890	309,474,856		13,699,377
891 ''	307,401,507	2,073,349	
892	333,018,405		25,606,898
893	348,538,138		15,519,733
894 "	325,210,712	23,327,426	
895 "	294,296,726	30,913,986	
896	272,474,708	21,822,018	
897	259,153,251	13,321,457	
898	266,720,684		7,567,433
1899	272,191,330		5,470,646
1900 ''	288,636,621		16,445,291
1901	302,502,382		13,865,707
1902	316,341,032		13,838,650
1903	287,450,000	28,891,032	10,000,00
1904	291,783,032	20,001,002	4,333,039
1905	295,488,438		3,705,406
1906	298,715,130		3,426,692
1907	298,294,750		948,170
1908	311,138,321		12,833,571
1909	328,110,749		16,972,428
1000			
1310	321,362,750	6,747,999	
011	318,547,900	2,814,800	
1014	304,043,400	14,504,500	
1913 "	296,175,300	7,868,100	

TABLE III. — SCOURED	Wool,	FLEECE	AND	Pulled.
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	Product.	Decrease,	Increase.
1889 pounds	134,795,350	1,796,605	
1890 "	139,628,220		4,832,870
1891	139,326,703	301,517	
1892 "	145,300,318		
1893 ''	151,103,776		
1894	140,292,268	10,811,508	
1895	125,718,690	14,573,578	
1896	115,284,579	10,434,111	
1897	111,365,987	3,918,592	
898	111,661,581		295,59
1899	113,958,468	1	2,296,88
1900	118,223,120		4,264,65
1901	126,814,690		8.591,57
1902	137,912,085		11,097,39
1903	124.366 405	13,545,680	11,031,33
1904	123,935,147	431,258	
1905	126,527,121	401,200	2,591,97
1909	129,410,942		
1000			2,883,82
1907	130,359,118		948,17
100000000000000000000000000000000000000	135,360,648		5,001,53
300	142,223,785		6,863,13
1910	141,805,813	417,972	
1911 "	139,896,195	1,809,618	
1912	136,866,652	3,029.543	
1913 "	132,022,080	4,844,572	

#### VALUE OF THE WOOL PRODUCT FOR TEN YEARS.

The total value of the wool product for the year, estimated on the scoured price in Boston, October 1, was \$57,582,954 for 132,022,080 pounds of wool. Last year 136,866,652 pounds were valued at \$76,020,229. The average value per pound of the fleece wool is 43.6 cents and 43.4 cents for pulled wool.

	Fleece and pulled. Scoured.	Total value.	Value per pound.		
			Fleece.	Pulled.	
	Pounds.		Cents.	Cents.	
1904	123,935,147	\$64,948,959	54.1	46.7	
1905		80,415,514	65.4	57.4	
1906		79,721,383	63.8	54.3	
1907	130,359,118	78,263,165	62.3	50.2	
1908	135,360,648	61,707,516	46.6	41.6	
1909	142,223,785	88,829,746	63.6	58.0	
1910	141,805,813	72,489,838	51	51.78	
1911		66,571,337	47.7	47.5	
1912		76,020,229	55.4	56.0	
1913	132,022,080	57,582,954	43.6	43.4	

#### AVAILABLE SUPPLIES, 1907-1913.

Table IV. contains an estimate of the available wool supplies for the year 1913–14, that is, pending the next clip, exclusive of imports after October 1 and supplies in manufacturers' hands. The corresponding figures for a series of years are given for comparison. The table is based on the Boston Commercial Bulletin's record of supplies in dealers' hands on January 1 last, the Department of Commerce figures of imports, and the figures of the preceding tables.

	1908.	1909.	1910.	1911.	1912.	1913.
Wool clip, fleece	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.
and pulled	311,138,321	328,110,749	321,362,750	318,547,900	304,043,400	296,175,300
Domestic wool on hand Jan- uary 1 Foreign wool	84,556,560	50,556,100	82,841,457	142,575,200	106,128,900	66,457,818
on hand Jan- uary 1	15,188,500	14,015,000	14,481,000	19,946,000	12,484,815	17,002,537
In bond Jan- uary l Foreign wool im- ported, Jan-	52,955,081	37,853,497	76,503,604	52,990,238	42,004,855	55,666,626
uary 1 to July 1	64,275,513	188,125,373	139,922,432	97,434,095	134,913,297	92,088,202
Total	528,113,975	618,660,719	635,111,243	631,493,433	600,575,267	527,390,483
Imports of wool, July 1 to Oct. 1,	33,205,899	62,814,168	17,807,601	26,527,408	59,011,294	22,736,792
Total to Oct. 1	561,319,874	681,474,887	652,918,844	658,020,841	659,586,561	550,127,275

TABLE IV. — AVAILABLE SUPPLIES.

In the month of October, 1913, there were imports of 6,915,185 pounds of wool.

The gross imports for the four months ending October 31, 1913, were as follows:

1913.	Class I.	Class II.	Class III.	Total.
	Pounds.	Pounds.	Pounds.	Pounds.
July	1,315,082	521,142	4,698,133	6,534,357
August	1,399,890	949,632	5,807,661	8,157,183
September	1,001,554	755,023	6,288,675	8,045,252
October	1,408,494	764,420	4,742,271	6,915,185
Total	5,125,020	2,990,217	21,536,740	29,651,977

For the corresponding four months of the previous year the imports were:

Class I.	Class II.	Class III.	Total.
Pounds.	Pounds.	Pounds.	Pounds.
22,911,954	9,057,980	44,855,578	76,825,512

#### THE ANNUAL WOOL SUPPLY.

Table V. shows the quantity of wool retained for consumption in the United States from 1890 to date. As the wool clip of the year reaches the market during the governmental fiscal year, the clip of any year is added to the imports of the fiscal year beginning July 1, so that the total supply for a series of years is accurately indicated by this combination, however it may differ from the available supplies in any one year of the series.

TABLE V. — WOOL	PRODUCED,	Imported,	EXPORTED,	AND	RETAINED	FOR	
Consumption.							

Fiscal Total Year. Imports.		Exports.	NET IM	PORTS,			FINE V	Vool.
	tal Domestic	Classes I. and II.	Class III.	Production	Retained for Con- sumption.	Retained for Con- sumption.	Per cent of Foreign	
	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	
890-91	129,303,648	2,930,045	36,783,501	89,882,024	309,474,856	435,848,459	345,966,435	10.63
891-92	148,670,652	3,210,019	53,350,167	92,312,922	307,101,507	452,562,140	360,249,218	14.81
892-93	172,433,838	4,310,495	46,189,082	122,026,119	333,018,405	501,141,748	379,115,629	12.18
893-94	55,152,585	6,497,654	7,167,380	42,007,798	348,538,138	397,193,069	355,185,271	2.02
894-95	206,081,890	6,622,190	98,388,318	105,402,507	325,210,712	524,722,428	419,319,921	23.46
895-96	230,911,473	12,972,217	126,966,355	97,918,882	294,296,726	512,235,982	414,317,100	30.64
396-97	350,852,026	8,700,598	235,282,735	112,141,457	272,474,708	614,626,136	502,485,908	46.84
397-98	132,795,302	2,625,971	47,480,033	82,810,437	259,153,251	389,322,582	306,512,145	15.50
398-99	76,736,209	14,095,335	3,349,870	60,947,423	266,720,684	329,361,558	268,387,135	1.25
399-1900	155,918,455	7,912,557	44,680,424	105,525,783	272,191,330		314,671,445	14.20
900-01	103,583,505	3,790,067	32,865,844	67,127,159	288,636,621	388,430,059	321,502,465	10.10
01-02	166,576,966	3,227,941	69,315,286	93,842,199	302,502,382	465,851,407	371,694,390	18.65
902-03	177,137,796	3,511,914	54,747,533	119,397,268	316,341,032	489,966,914	370,569,646	14.63
903-04	173,742,834	3,182,803	55,999,545	114,880,236	287,450,000	458,010,031	345,129,795	16.22
904-05	249,135,746	2,561,648	134,407,321	112,292,726	291,783,032	538,357,130	426,066,402	31.54
905-06	201,688,668	5,642,859	98,336,137	97,902,153	295,488,438	491,534,247	393,632,094	24.99
906-07	203,847,545	3,446,748	91,726,655	108,888,982	298,715,130	499,115,927	390,226,945	23.50
907-08	125,980,524	5,626,463	57,846,442	62,690,077	298,294,750	418,648,811	346,141,192	16.71
908-09	266,409,304	3,523,975	164,867,536	99,046,169	311,138,321	574,023,650	476,005,877	34.60
09-10	263,928,232	4,055,473	139,846,192	120,074,087	328,110,749	587,983,508	467,909,421	29,90
10-11	137,647,641	8,205,699	45,414,054	84,027,888	321,362,750	450,804,692	366,776,804	12.38
911-12	193,400,713	1,719,870	85,531,845	106,148,998	318,547,900	510,228,743	404,078,845	21.12
912-13	195,293,255	4,423,161	80,883,313	109,986,781	304,043,400	494,913,494	384,926,713	21.00
913-14					296,175,300			

The proportion of foreign fine wools decreased from 21.12 per cent in 1912 to 21 per cent in the present year. The total quantity of fine wools retained for consumption, both foreign and domestic, amounted to 384,926,713 pounds, a decrease of 19,152,132 pounds from the preceding year.

The net imports of Class I and II wools are 4,648,532 pounds less than in the preceding year. In fact, the net imports of these wools in the three last years amount to but little more than two-thirds the similar imports for the two years next preceding.

The following table, computed from Table V., shows the total and average annual supplies for five-year periods, beginning in 1888, the ten years 1888–1897, 1893–1902, and 1903–1912, the five-year periods, 1903–1907, 1908–1912, and the year 1913:

Table VI. — Wool Supply, 1888-1913. — Domestic Production and Imports less Exports.

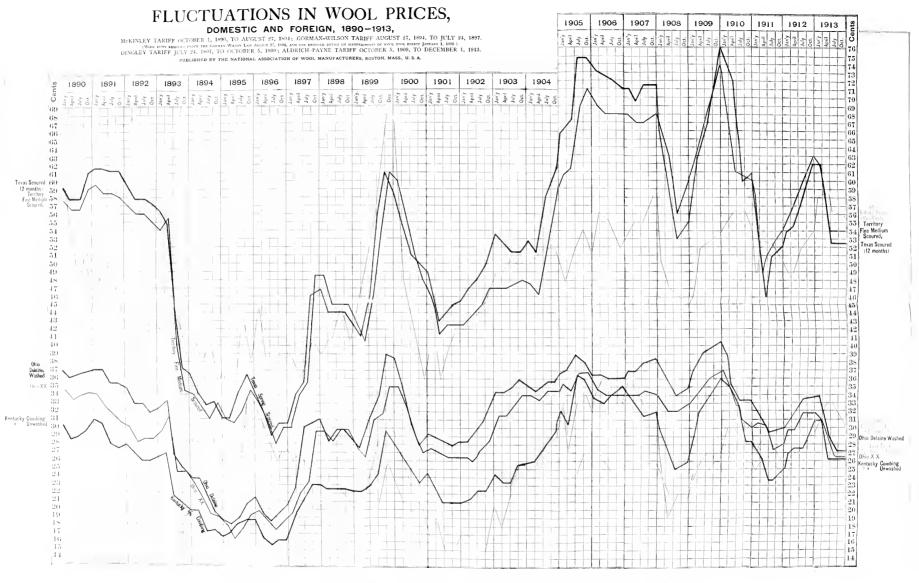
Fiscal years ending June 30.	All wools.	Fine wools.
	Pounds.	Pounds.
1888-1892. Five years, total	2,122,407,842	1,686,818,840
Annual average	424,481,568	337,363,768
1893-1897. Five years, total	2,549,920,592	-2,070,423,829
Annual average	509,984,118	414,084,766
1888-1897. Ten years, total	4,672,328,434	3,757,242,669
Annual average	467,232,843	375,724,267
1898-1902. Five years, total	1,988,771,621	1,582,374,53
Annual average	397,755,324	316,474,90
1893-1902. Ten years, total	4,538,692,213	3,652,798,360
Annual average	453,869,221	365,279,83
1903-1907. Five years, total	2,476,984,249	1,925,618,885
Annual average, five years	495,396,850	385,123,770
1898-1907. Ten years, total	4,465,755,870	3,507,993,419
Annual average	446,575,587	350,799,34
1908-1912. Five years, total	2,541,688,925	2,060,912,139
Annual average	508,337,785	412,182,42
1903-1912. Ten years, total	5,018,673,174	3,986,531,02
Annual average, ten years	501,867,317	398,653,103
1913	494,913,494	384,926,71

#### SLAUGHTER AND MOVEMENT OF SHEEP.

The total number of sheep killed yearly at four Western centers, Chicago, Kansas City, St. Louis, and Omaha, and total yearly receipts of sheep at Eastern seaboard markets, Boston, New York, Philadelphia, and Baltimore, are reported in the "Cincinnati Price Current's Statistical Annual," as follows:

Table VII. — Seaboard Sheep Receipts, and Slaughter at Principal Western Points, 10 Years, 1903-1912.

Calendar Year.	Western killings.	Seaboard receipts.	Total.
1903	5,827,000	3,314,000	9,141,000
904	5,465,000	3,128,000	8,593,000
905	5,879,000	2,425,000	8,304,000
906	6,117,000	2,606,000	8,723,000
907	5,701,000	2,956,431	8,657,431
908	5,824,000	3,364,349	9,188,349
909	6.578,000	3,346,147	9,924,147
910	6,911,000	3,173,706	10,084,706
911	8,295,000	3.244.000	11,539,000
912	9,055,000	6,426,720	15,481,720



The Western killings and the seaboard receipts are gradually increasing, as is to be expected because of improved business methods, the growth of population at the same time increasing the demand for meat. The increase for the year is 3,942,720 head and the total 15,481,720.

The "Boston Commercial Bulletin" has recently obtained from the Department at Washington the following table, No. VIII., showing the number of sheep carcases inspected by the Government officials at the various slaughter houses in the country for the year ending October 31, 1913. This is the first time that such a statement has been available. It confirms the opinion expressed a year ago that the sheep slaughter must equal fifteen millions at least. The total number amounts to 14,508,142; the killings of uninspected animals by farmers and others for local use will easily raise the number to our estimated figure and may even exceed it.

It is therefore clear that our estimate of brushed pulled wool, 43,500,000 pounds, is fair and conservative.

#### THE COURSE OF PRICES.

The uncertainty existing due to pending tariff legislation consequent upon the change in the Administration has been in a large measure responsible for the quiet state of the wool market during the year. Conditions were such that hardly any one, producer, dealer, or manufacturer of wool, dared to proceed otherwise than with the utmost caution and the year has been noticeable in the main for a hand to mouth business, with the trend of prices downward, until in some instances they fell below the free wool level, that is, below the price for which if free from duty competing wools could be secured from abroad. Under the new law wool became free December 1, 1913, and the new and reduced duties on manufactures of wool took effect one month later, that is, on January 1, 1914.

Table IX. shows the Boston prices of domestic wools in October for fifteen years, during which the tariff on wool and woolens has been practically unchanged. The relative prices are shown in the table, and are graphically indicated by the chart of fluctuations in wool prices opposite this page.

Table VIII. - Sheep Slatchter of the United States for the Year Ending November 1, 1913. Compiled from Official Reports by the Boston Commercial Bulletin.

	Chieago.	Kansas City.	National Stock Yards.	South Omaha.	South St. Joseph.	All Other Points.	Totals.
November	497,124	102,236	45,428	135,533	30,000	613,722	1,424,063
)ecember	438,204	88,802	57,256	114,145	27,661	493,699	1,219,767
January	368,135	136,003	63,645	154,015	42,934	427,753	1,192,485
ebruary	255,766	135,733	37,429	134,852	64,381	332,721	960,882
farch	224,568	124,975	34,835	114,101	57,008	327,695	883,182
pril	276,819	149,297	38,085	125,134	72,593	386,728	1,048,656
May	311,610	143,699	64,485	103,420	65,937	438,194	1,127,345
une	341,287	127,071	111.876	54,909	34,196	465,276	1,134,615
ulv	384,562	95,044	113,769	116,429	41,376	522,300	1,273,480
vugust	386,564	98,396	77,547	147,485	44,310	489,138	1,243,440
September	491,980	159,804	57,791	188,553	64,001	524,176	1,486,305
ctober	456,439	185,358	44,615	193,260	68,789	567,461	1,513,922
Totals	4,433,058	1,546,418	746,761	1,581,836	611,186	5,588,663	14,508,142

Table IX. — Comparative Prices of Domestic Wool in Boston, October, 1899-1913.

	8.00	1900	1961	2061	1903	1904	1905	1906	04	1908	1909	1910	911	1912	1913
	2	2	6	2	19	2	19	19	190	19	120	2	- 19	15	=
OHIO, PENNSYLVANIA, AND WEST VIRGINIA. (Washed.)															
XX and above Medium	$31\frac{1}{2}$ $34\frac{1}{2}$ $34\frac{1}{2}$	$28\frac{1}{2}$ $28\frac{1}{2}$ $28\frac{1}{2}$	$   \begin{array}{c}     26\frac{1}{2} \\     26 \\     28   \end{array} $	$28\frac{1}{2}$ $29$ $31\frac{1}{2}$	34 32 36	35 36 36	$36\frac{1}{2}$ $41\frac{1}{2}$ $37\frac{1}{2}$	34 40 36	$\frac{34}{40}$ $\frac{381}{2}$	33 34 35	36 40 40	30 34 34	28 31 30	31 37 34	26 30 27
Fine	$\begin{array}{c} 22\frac{1}{2} \\ 25 \\ 24\frac{1}{2} \end{array}$	$\begin{array}{c} 18\frac{1}{2} \\ 23\frac{1}{2} \\ 21\frac{1}{2} \end{array}$	$19\frac{1}{2}$ $20$ $21$	$\frac{21\frac{1}{2}}{23}$ $\frac{24}{24}$	$23\frac{1}{2}$ $25$ $26$	24 30 27	$\begin{array}{c} 27 \\ 34\frac{1}{2} \\ 30 \end{array}$	26 33 28	27 33 31	23 26 28	28 36 33	22 28 26	20 25 24	23 30 28	20 20 20 20
Fine	$25\frac{1}{2}$ $32$ $31\frac{1}{2}$	$22\frac{1}{2}$ $27\frac{1}{2}$ $25\frac{1}{2}$	$\begin{array}{c} 20\frac{1}{2} \\ 24\frac{1}{2} \\ 24\frac{7}{2} \end{array}$	24 27 29	$27\frac{1}{2} \\ 31 \\ 34$	$27\frac{1}{2}$ $33$ $34$	31* 40 36	30* 39 34	30* 39 37	28* 33 34	31* 38 38	28* 33 32	* 30 28	* 36 33	29
Fine	$\begin{array}{c} 20 \\ 22\frac{1}{2} \\ 22\frac{1}{2} \end{array}$	$\begin{array}{c} 16\frac{1}{2} \\ 22\frac{1}{2} \\ 18\frac{1}{2} \end{array}$	$17$ $19\frac{1}{2}$ $19$	$^{19}_{21\frac{1}{2}}_{22}$	$\begin{array}{c} 21\frac{1}{2} \\ 24 \\ 23\frac{1}{2} \end{array}$	$\frac{22}{29}$ $\frac{25}{25}$	$\frac{25}{33}$ $\frac{28}{28}$	$\frac{24}{32}$	$25\frac{1}{2}$ $32$ $29$	22 25 26	26 34 32	20 27 25	18 24 22	22 29 26	19 22 21
KENTUCKY AND INDIANA. (Unwashed.) Medium Missouri, Iowa, AND ILLINOIS.	$22\frac{1}{2}$	$24\frac{1}{2}$	21	$22\frac{1}{2}$	241	30	35	33	31	25	35	28	25	31	2
(Unwashed.) Medium TEXAS.	22	$22\frac{1}{2}$	19½	211	23½	29	34	32	30	24	32	26	23	28	2:
(Scoured Basis.) Spring, fine, 12 months Fall, fine	49 44	50 41	44 37	52½ 45	52½ 42½	62 52	75 62	70 58	71 58	55 45	75 60	60 50	52 44	62 50	5
Spring, Northern, free, 12 months . Fall, free	49 44	49 41	43½ 38½	50 43	52 42½	62 53	74 62	70 60	68 58	50 40	70 53	55 45	48 40	54 45	4 4
IDAHO, OREGON, ETC. (Scoured Basis.) Staple fine	55 50 50 48	51 48 48 47½	46 44 43 40	55 50 48 45	55 51 50 46	65 60 60 55	76 70 72 68	71 66 68 63	73 68 65 60	60 52 53 45	78 70 70 65	65 57 58 50	60 52 50 45	67 60 60 56	5 4 4 4

<sup>\*</sup> Nominal.

#### MOHAIR.

There has been no material change in the mohair industry except that there appears to have been a slight increase in the quantity produced, but unlike its fellow fiber wool, it still receives the fostering care of the United States government although in reduced measure, it being now dutiable at 15 per cent ad valorem instead of as under the previous law at 12 cents per pound as wool of Class II.

The estimated production for the year 1912 was 4,000,000 pounds valued at 31 cents per pound, Boston prices, equal to a total value of \$1,240,000. The production this year is estimated to be 4,500,000 pounds and the average value 27 cents, making a total value of \$1,215,000 as against \$1,240,000 last year.

The Angora goat which yields the mohair is raised chiefly in Texas, Oregon, California, New Mexico, and Arizona, though in many other States a few are kept, frequently for experimental purposes.

Mohair Production in the United States.
U.S. Census Reports and Commercial Estimates.

	Fleeces.	Weight of Mohair.	Value.
		Pounds.	
1900	454,932	961,328	\$267,864
1910	1,682,912	3,778,706	901,597
1912		4,000,000*	1,240,000
1913	<b></b>	4,500,000*	1,215,000

<sup>\*</sup> Commercial estimate.

#### BOSTON RECEIPTS AND SHIPMENTS OF WOOL.

Table X. shows the annual receipts of domestic and foreign wool in Boston by months for the years 1909 to 1913, inclusive, and Table XI. shows the shipments in pounds from Boston, by months over the several railroads and by sea for the year. Only the direction and quantity of the shipments can be determined by this table, which contains a certain amount of duplication, for it reports shipments of wool from Boston to be scoured, some of which is reshipped to Boston, to be again sent away to factories where it is used.

The receipts of domestic wool in Boston for the year were 692,668 bales and bags, containing 161,800,680 pounds of wool. During the same period the receipts of foreign wool amounted to 154,925 bales, equal to 63,336,325 pounds. In the previous year the domestic receipts were 1,026,626 bales, 236,458,198 pounds, and 308,524 bales, containing 124,143,562 pounds of foreign wool.

The total receipts of foreign and domestic wool for the twelve months of 1913, as shown by Table X., amounted to 225,137,005 pounds, as against 360,601,760 pounds in the twelve months of

<sup>†</sup> Boston market value.

the preceding year, a decrease of receipts of 135,464,755 pounds. The shipments from Boston in the twelve months amounted to 183,710,214 pounds in 1913 and 276,912,464 pounds in 1912, a decrease of shipments of 93,202,250 pounds as compared with the previous year.

The difference between the receipts and shipments, 41,426,781 pounds, indicates the quantity of wool stored in Boston for dealers and manufacturers and corresponds very closely with the report of stocks of unsold wool in the Boston market January 1, 1913 and 1914, as compiled for the Boston Wool Trade Association which are as follows:

STOCK OF WOOL	IN	BOSTON	MARKET.
---------------	----	--------	---------

	January 1, 1914.	January 1, 1913.
Territory, California, Texas	23,627,371	21,732,733
and Minnesota, Iowa, and Missouri)	1,348,029	4,712,000
Scoured	2,798,598	3,605,379
Pulled	2,656,457	1,872,206
Foreign, Class 1 and 2	10,550,064	8,719,383
Foreign, Class 3	2,820,030	2,208,154
Total	43,800,549	42,849,855

## STATISTICS OF IMPORTS OF WOOL AND WOOLENS.

We are again indebted to the Hon. A. H. Baldwin and the Hon. O. P. Austin, Chiefs of the Statistical Bureau of the Department of Commerce, for the facts relating to the imports of wool and wool manufactures for the fiscal year ending June 30, 1913, which are given in Tables XII. to XIV. inclusive, and for the table of imports entered for consumption for the fiscal years ending June 30, 1912 and 1913, which appears at the close of this Bulletin.

Table X. — Receipts of Wool in Boston, 1909-1913. (Boston Chamber of Commerce, James A. McKibben, Secretary.)

	Foreign.	Pounds.	8,652,939	_		_	_							ō.	63,336,325
	Fc	Bales.	16,328	22.30	13,27	11,21	90,6	7		12,52	10,37	10,16	18,69	154,925	
1913	Domestie.	Pounds.	6,518,944	5,464,392	5,562,432	9,125,364	14,272,301	135,948,481	36,928,634	15,584,164	7,965,441	6,559,915	9,802,339		161,800,680
	Dom	Bales and Bags.	38,137	35,390	26,190	37,788	56,443	137,178	141,055	73,678	36,308	28,088	45,840	692,668	
	Foreign.	Pounds.	5,946,419	18,503,160	13,561,515	13,169,684	7,750,938	8,634,631	18,312,198	8,429,924	8,800,844	4,754,498	4,004,308		124,145,562
ei	For	Валев.	15,927	36,975	29,754	:17,964	616,61	10,774	45,493	24,695	872,00	13,637	9,526	308,524	
1913	estic	Pounds.	10,768,077	8,219,320	8,767,750	15,616,993	24,116,891	57,604,616	52,052,251	21,840,434	10,248,197	9,271,053	8,894,998		236,458,198
	Domestic	Bales and Bags.	61,373	42,635	618,24	72,883	96,333	218,658	205,327	86,906	50,823	51,239	15,395	1,026,626	
-		Foreign,	13,039	18,001	23,647	10,508	7,655	5,765	11,503	7,210	12,880	8,202	10,619	166,250	149,487,123
11911	:	Domestie.	59,785	40,301	57,237	63,461	101,203	189,980	163,502	10,804	57,755	65,382	104,404	960,262	247,463,739
÷		roreign.	50,811	678,78	25,085	9,207	1,954	3,133	10,106	6,885	5,376	6,171	12,342	202,232	81,173,849
0161		Pomestie.	36,169	28,581	22,775	38,748	45,074	118,726	188,599	80,745	62,111	71,598	61,569	782,419	195,536,835
.00		roreign. Pomestic.	21,670	51,137	55,005	10,871	39,455	13,303	33,974	26,975	23,237	18,305	16,753	394,103	149,457,123
6061		Tomestie.	40,983	34,274	43,946	78,955	114,834	152,135	142,493	70,462	47,832	38,050	43,882	921,973	eight in pounds 247,463,739 149,487,123 195,536
		0	January	arch	pril	ay	me	11 y	ugust	ptember	tober	November	December	Total	Weight in pounds

Table XI. — Suipments of Wool from Boston by Months (Pounds). (Boston Chamber of Commerce, James A. McKibben, Secretary.)

							1913.						
Kallroads.	January.	February.	March.	April.	May.	June.	July.	August. S	September. October.		November. December.	December.	Total.
Boston & Albany R.R.: Boston & Albany Grand Junction New York, New	4,508,228 1,020,270	3,800,393	3,296,440	2,263,567	1,446,069	2,581,859	2,362,232 940,529	2,856,886	3,424,641	3,155,576	3,496,558	3,915,801 2,921,855	36,908,250 10,352,624
Haven & Hart- ford R.R Boston & Maine	3,082,982	2,220,223	2,921,640	2,018,750	1,633,740	1,872,690	4,103,509	3,427,600	5,379,420	3,048,670	3,455,580	3,441,410	34,606,214
Eastern & Western Div	2,361,500	2,407,000	2,308,454	530,650	363,230	555,410	950,760	3,079,920	3,232,200	1,657,900	1,751,500	2,832,000	22,080,524
Southern Div.	4,282,440	3,560,970	3,047,200	1,248,950	1,223,975	2,298,955	2,319,651	2,601,691	2,510,070	2,660,707	2,698,209	5,185,645	33,638,463
Fitchburg Div. Warren Bridge Division	1,157,080	595,937	574,398	190,092	334,967	359,270	448,920	806,186	1,106,550	655,651	421,212	459,998	7,110,261
Myetic Wharf Storehouse * . By sea	2,514,900 1,779,636	803,119 2,703,448	1,839,400	562,478 2,246,150	206,545	269,380	861,069	895,770 1,548,539	2,086,310 1,627,548	349,690 1,587,700	214,477	5,885,381 1,537,290	16,488,519 22,575,359
Total	20,507,036	20,507,036, 16,876,730, 17,195,419	17,195,419	9,961,607	7,848,018	10,552,815	13,667,529	15,446,532	17,709,046	13,495,457	14,270,645	26,179,380	183,710,214
Total after Jan- uary 1	20,507,036	20,507,036 37,383,766	54,579,185 64,540,792	64,540,792	72,388,810	82,941,625	96,609,154	112,055,686	96,609,154 112,055,686 129,764,732 143,260,189	143,260,189	157,530,834	183,710,214	183,710,214
Total after Jan. nary 1 preced. ing year	28,670,614	52,449,239	69,523,237	88,654,490	118,428,457	141,355,735	28,670,614 52,449,239 69,523,237 88,654,490 118,428,457 141,355,755 164,719,534 190,522,058 215,998,239	190,522,058	215,993,239	228,618,739	260,400,254	228,618,739 260,400,254 276,912,464 276,912,464	276,912,464

\* Wool landed at Mystic Wharf is generally shipped out over either the Portland or Southern Divisions of the Boston & Malne Rallroad.

Table XII. — Wool Imported into Boston, New York, and Philadelphia. By Ports and Classes.

		BOSTON.			NEW YORK.		<u>a</u>	читаретрига.		TOTAL.
JUNE 30.	Class 1.	Class 2.	Class 5.	Class 1.	Class 2.	Class 3.	Class 1.	Class 2.	Class 3.	
	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.
1896	78,398,112,	9,539,881	30,325,673	28,939,693	543,352	52,764,614	8,301,279	2,070,608	15,055,110	225,938,322
1897	137,221,457	23,156,843		48,428,014	2.371,604		0,884,925	1,811.398	13,676,511	332,495,042
1898	36,205,712	2,672,113		5.865,916	458,732	50,071,999	2,306.013	17,505	9.661,885	130,083,012
1899	8,335,942	1,554,556	12,456,404	2,911,683	155,121	43,251,114	1,517,560	344,368	4.971,888	75,498,636
1900	30, 192,843	5,343,455	29,333,226	3,561,996	1,275,008	61,922,600	3,281,782	3,266,758	14.486,204	152,663,872
1901	22,416,924	3,396,580	19,963,032	5,602,497	210,782	39,112,400	2,072,551	572,304	8,171,451	
1902	51,479,822	2,820,800	21,778,976	7,308,817	920,301	52,417,988	5.468,922	266,807		-
1903	30,601,779	8.877.714		5,323,738	1,693,694	54,119,001	4,443,990	1,991,395	29.648.574	171,994,458
1904	37,821,884	8,980,496		3.070,482	1,389,643	48,582,335	4,509,591	362,262		170,401,040
1905	86,741,441	19,018,797		9,908,856	2,908,801	44,082,025	11,146,872	1,569,526	30,346,875	242,792,953
1906	64,801,760	8,336,094	22,420,950	8,555,810	1,657,970	49,278,261	10,227,347	1,772,888		193,840,054
1907	61,116,729	4,204,964		8,817,037	1,159,185	61,357,911	8,744,454	854,390		
1908	34,002,148	7,247,799	13,023,020	3.397,855	522,524	36,778,123	6,220,038	459,275		
1909	114,512,293	11,591,627	24,757,185	11,100,437	383,908	52,853,241	12,531,238	1,852,418	24,005,573	253,587,920
1910	79,232,943	17.022,966	27,476,785	14,399,419	1,574,625	66,098.923	13,081,388	4,635,818	26,762,386	250,285,253
1911	32,689,348	5.532,189	20,117,152	1,327,443	252,927	43,540,674	2,205,818	531,663	18,818,639	125,015,853
1912.	54,443,667	5.840.571		4,189,259	473,126	56,040,867	6.878,019	1,162,021	22,660.591	177,226,772
1913	50.887.889	8,468,555	27,131,377	3,652,043	692,695	55,702,561	6,483,156	2,575,977	24,667,461	180,261,721

Norg. - These figures represent about 95 per cent of the total quantity of wool imported into all the ports of the United States.

Тавье XIII. — Wool Імроктер імто Воsтом, New York, and Рипарбьеніа. BY PRINCIPAL COUNTRIES OF PRODUCTION.

YEAR ENDING JUNE 30.	Russia.	Turkey.	United Kingdom.	Argentina.	Uruguay.	Chinese Empire.	British E. Indies.	British Oceania.	All other Countries.	Total.
	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds	Pounds	Pounds
1896	13,150,509	17.987,753.	14.229.068	32.281.341	9.048.350	96.084 939	-	79 995 000	90 904 440	
1897	19,706,449	20,239,717	•		_		_	109 919 951	49 121 992	
1898	16,999,224		_	16,734,279		20,369,294	•	31.877.959		002,400,042
1899	13,373,350		9,156,624	7,957,657	149,573		6.949.491	7.949 740		75 (08 696
1900	18,869,252		20,393,063		1,072,307		9,397,020	23, 121, 394		159 668 879
1901	13,720,814		16,919,793		783,075		4,146,698	22,570,030		101,518,591
1902	16,322,231	12,215,316		45.287.370	533,634	18,843,396	6.813,401	26,559,531	13,930,799	
1901	19,400,392			23,265,309	541,384		11,850,446	25,238,498		18,390,678 171,994,458
1904	25,405,797			28,168,060	112,208		10,088,556	25,792,098		13,374,315 170,401,040
1908	20,730,451			47,695.567	7,740.309		12,202,135	56,212,733	16,460,214	242, 792, 953
1907	61,160,785		21,615,963	42,167,927	5.807,190		6,011,319	39,548,551	11,242,388	193,840,054
1908	10,0102,12			23.195,208	5,856,611	39,762,115	8,697,581	52,538,582	12,338,352	
1909	700.010,21			16,221,285	1,604,221	21,717,431	1,936,421	27,032,576	7,438,644	
1910	10.000,002			58,379,834	5,868,232	5,868,232 35,634,909	12,952,758	79,420,778	12,189,107	253,587,920
1911	19 011 956	_	-	31,082,184	8,789,785	46,599,637	16,603,135	68,199,625	15,128,955	250,285,253
1919	90,444,550	19.002.982		17,891,376	711.525	711.525 30,055,965	10,831,635	20,494,165	9,679,750	125,015,853
1913	94 698 116	10,002,010	10,000,409	27,621,628	3,216,988	3,216,988 32,636,950	15.725,299	38,494,677	11.938,839	177,226,772
	21,000,110	10,401,000	19,330,440	26,742,584	3,718,873	3,718,873 35,572,181	10,212,091	31,852,863	12,680,536	180.261.721

Note. - These figures represent about 95 per cent of the total quantity of wool imported into all ports of the United States.

#### IMPORTS OF WOOL BY PORTS AND CLASSES.

Tables XII., XIII., and XIV. show the gross imports of wool both by classes and ports, as brought into the three principal wool importing centers, but as stated in the footnotes to the tables there is a moderate quantity imported each year into minor ports. The tables show a moderate increase in the quantity of wool imported, as compared with the preceding year. Boston retains her supremacy in the importation of Class I and II wools, receiving a total of 59,356,441 pounds, against 13,403,871 pounds in the other two ports. The imports of Class II wools, never very great in quantity, amounted this year to 11,737,224 pounds, or about 6.5 per cent of the total quantity of all wools imported. The imports of Class III wools into New York amounted to 55,702,561 pounds, a total nearly four millions of pounds in excess of the receipts of similar wools in Boston and Philadelphia. The total importation of Class III wools in these three ports amounted to 107,389,118 pounds, and of all wools, to 180,261,721 pounds.

#### COUNTRIES OF PRODUCTION AND SHIPMENT.

Table XIV. shows the countries of production and immediate shipment of wools imported into the United States during the fiscal year ending June 30, 1913. Owing to changes in method in the publication of the "Commerce and Finance Reports" by the Department of Commerce, this statement was not prepared by the statistical bureau but has been compiled with much trouble from the "Monthly Summaries," as was also done last year. It is to be hoped that the Department will resume the publication of this table in connection with the June issue of the Summary.

Table XIV. — Wool Imported into Boston, New York, and Philadelphia, Fiscal Year ending June 30, 1913, by Countries of Production, Immediate Shipment, and Classes.

Compiled from Commerce and Finance Reports.

Countries of	Countries of immediate		LASSIFICAT	10N.	(1)
PRODUCTION.	shipment.	Class 1.	Class 2.	Class 3.	TOTAL.
		Pounds.	Pounds.	Pounds.	Pounds.
Austria-Hungary .	Austria-Hungary			717,217	772,522
Belgium	Germany			55,305 73,617	73,617
Denmark	Denmark		3,840	82,294	86,134
	Belginm			29,351	)
France	England   France		17	236,782 3,443,681	4,064,392
	Italy			96,169	i ' '
	Portugal	00 000		227,030	J <sub>.</sub>
Germany	Russia in Europe	36,338		1,411,348 6,663	1,454,349
Greece	Greece			26,785	26,785
	Denmark			1,697,721	)
Iceland	England   Germany			265,415 20,635	} 1,760,351
	Iceland			488,371	}
Italy	Belgium			37,477	{ 262,526
Netherlands	(ltaly	460	42 118,485	224,547 $51,615$	170,100
Netherlands	(England			94,869	)
Portugal	France			223,209	721,681
	( Portugal			403,603 30,542	)
	Denmark			3,711	
Russia in Europe .	England			225,725	7,421,854
reassa in Europe .	France   Germany   Russia in Europe			97,994	11,321,004
	Russia in Europe	10,015	234,519	112,536 16,706,812	}
Servia	Austria-Hungary			109,493	109,493
	Belgium   England			134,745 20,749	)
	France	: : : : :	: : : : :	53,847	619,237
Spain	Spain			322,238	
	(Portugal		232,552	87,658 573,225	J
Turkey iu Europe .			202,002	210,875	4,784,993
, <sub>P</sub>	(Turkey in Europe	880,238		2,393,895 2,003,363	)
England	Germany		4,672		10,654,022
England	Italy		280		10,004,022
	Scotland		137,032		j
Scotland	England	33,432	66,774 463,775		7,977,695
Tuelond	Scotland		667,967	9,036	1
Ireland	Scotland			21,120	698,123
British South Africa	England	25,403 180		70,153° 335,082	912,335
Egypt			345,331	15,419	15,419
	(England			6,245,916	)
British East Indies .				3,962,811	10,212,091
	( Germany		485	3,374 34,927,678	1
	England			555,943	i
China	Russia in Europe		908	15,372 56,896	35,572,181
	Turkey in Asia			14,899	1
	England			38,929	ĺ
				52,595	1
Porsia	France				0.100.00#
Persia	Persia			651,652 180,291	942,085

TABLE XIV. - Continued.

Countries of	Countries of immediate		LASSIFICAT	TION.	
PRODUCTION.	shipment.	Class 1.	Class 2.	Class 3.	TOTAL.
		Pounds.	Pounds.	Pounds.	Pounds.
	England			110,298	)
Donate to Asta	France				
Russia in Asia	Russia in Asia   Russia in Europe			7,06×,979 1,595	7,273,26
	Turkey in Asia			56,589	1
	(Austria Hungary			25,661	ĺ
	Belgium			154,847	1
	England		76,558	2,156,009	
	Germany			430,299 3,303	i
December of the Aust	Italy			70	1
Turkey in Asia .	Netherlands			36,376	10,672,042
	Russia in Asia			90,629	
	Russia in Europe	14.00		38,584	1
	Turkey in Asia Turkey in Europe	14,637	1,895	7,262,070 $256,828$	
	Persia			124,276	
Canada	Canada	16,856	48,383		65,239
Panama	Panama			294	294
Bermuda	Bermuda	43		10.001	43
Dutch W. Indies	France			10,824 38	{ 10,862
Santo Domingo	Santo Domingo			190	190
9	Argentina	22,247,462		2,322,741	)
	Belgium	7,023			
Argentina	₹ England	2,113,880		18,639	26,742,584
	Germany   Uruguay	20,413		7,776	
Brazil	Brazil	4,000		62,051	62,05)
Chile	(Chile	33,085		62,051 16,693	164,282
onie	England				104,232
Peru	England	20,036	19,734		181,084
	(Argentina	233 846	141,314		,
	Belgium	96,527			1
Jruguay	⟨England	89,752			3,718,873
	Germany	9,533	'	107.040	!
	Uruguay	3,108,176		181,049	J
Venezuela	Venezuela			14,509 23,095	37,604
Falkland Islands				20,000	55,166
	(Australia	5,484,054	'		) ′
	Belgium	163,380		279	1
Australia and Tas	England				} } 11,006,884
mania	⟨ Frauce     Germany				} 11,000,554
	Italy	175			i
	New Zealand	27,928			j
	(Australia				)
New Zealand	England	15,141,116			  > 20,845,979
Dealand	Scotland				7 20,540,518
	New Zealand	5,542,819			
Total		61 023 008	11 727 994	107,389,118	180.261.721

The imports of Class I wools were 4,500,000 less than those of last year, and fell short by many millions of pounds those of recent preceding years, as appears from the following tabular statement, which covers the years 1910, 1911, 1912, and 1913,

and shows at the same time the amount coming into this country from each of the principal countries of production:

	1913.	1912.	1911.	1910.
	Pounds.	Pounds.	Pounds.	Pounds.
Australasia	31,818,992 $24,393,428$	$38,186,399 \\ 23,049,591$	20,470,121 $14,014,295$	$\begin{array}{c} 68.094,059 \\ 27.331,168 \end{array}$
Uruguay	3,537,724	3,125,759	715,525	8,768,627
All other	$1,\!272,\!954$	1,149,196	1,022,668	2,519,896
	61,023,098	65,510,945	36,222,609	106,713,750

Our supply of Class II wools is derived principally from the British islands, which furnished 8,968,937 pounds of the 11,737,224 pounds of these wools imported during the year. The other wools classed under this head were mostly Angora goat hair, which comes from Turkey and the Cape of Good Hope, and is known as mohair, and camel, vicuna and similar hairs, the product of Asia and South America.

Class III wool comes from nearly every portion of the globe, but principally from the countries named in the subjoined statement, which covers the imports of the last three years. These wools are mostly used for the manufacture of carpets and low-grade blankets.

	1913.	1912.	1911,
	Pounds.	Pounds.	Pounds.
Chinese Empire	35,570,788	32,634,956	30,049,836
Russia (Europe and Asia)	24,450,574	20,146,464	12,943,813
United Kingdom	9,447,134	7,415,770	8,245,410
Turkey (Europe and Asia)	13,833,505	12,308,244	7,963,172
British East Indies	10,212,091	15,675,017	3,785,420
Argentina	2,349,156	4,572,037	10,457,555
Germany	1,418,011	2,585,971	2,128,734
France	4,033,013	<i>' '</i>	, ,
Iceland	1,760,351		
All other	4,314,495	8,901,650	6,902,525
-	107,389,118	104,240,109	82,476,465

The following table gives the total gross imports into the United States for the ten last fiscal years. The quantity imported into other than the principal ports can be ascertained by comparison with Tables XII. and XIII.

TABLE XV. - GROSS IMPORTS OF WOOL, FISCAL YEARS 1904-1913 - POUNDS.

	Class I.	Class II.	Class III.	Total.
1904	45,575,993	12,934,143	115,232,698	173,742,834
1905	109,888,258	26,551,624	112,695,864	249,135,746
1906	86,810,307	15,204,254	99,674,107	201,688,668
1907	82,982,116	10,671,378	110,194,051	203,847,545
1908	45,798,313	13,332,540	66,849,681	125,980,524
1909	142,580,993	21,952,259	101.876,052	266,409,304
1910	111,604,330	31,614,235	120,721,019	263,939,584
1911	40,104,845	12,456,468	85,086,328	137,647,641
1912	71,203,329	15,557,664	106,639,720	193,400,713
1913	67,238,715	16.886,446	111,168,094	195,293,253

#### IMPORTS OF WOOL MANUFACTURES.

Table XVI., which gives the gross imports of manufactures of wool, shows a total foreign value of \$16,318,141, an increase of \$1,405,522 over 1912 and \$2,082,864 less than the average of the preceding five years shown in the table.

These, being the foreign invoice values, cannot properly be used for comparison with the value of home manufactures, except by the addition of the customs duties paid. For such purposes the table of imports entered for consumption should be used.

Table XVI. -- Imports of Wool Manufactures, 1908-1913. (Foreign value.)

GROSS IMPORTS, YEARS	9	1908.	19	1909.	61	1910.	1911.		10	1912.	<b>1</b>	1913.
ENDING JUNE 30.	Quantity.	Quantity. Value. Quantity. Value. Quantity. Value. Quantity. Value. Quantity. Value. Quantity.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Carpets (sq. yds.)	686,784	686,784 \$2,745,066 1,042,378 \$4,082,512 1,205,982 \$4,591,721 1,003,741 \$5,807,805	1,042,378	\$4,032,512	1,205,982	\$4,591,721	1,003,741	\$3,807,805	841,249	841,249 \$3,850,804 1,085,431 \$4,895,989	1,085,431	\$4,895,989
Clothing, etc., except shawls and knitgoods	•	1,620,270	:	1,416,934	:	1,416,934 1,813,542	:	2,274,756	:	2,171,477	2,171,477	2,158,384
Cloth, pounds	4,443,248	4,859,796	4,510,224		4,780,606 6,232,790	6,425,664	4,727,279	6,425,664 4,727,279 5,142,507	4,119,110	4,630,478	4,630,478 4,285,495	4,888,447
Dress goods (*q. yds.)	45,035,142		9,217,804 34,619,747		6,761,536 48,345,084		9,374,140 30,414,343	6,262,566	15,415,245		3,279,198 15,712,155	3,321,626
Knit fabrics	:	35,635	:	57,113	:	17,258	*	*	*	*	*	*
Shoddy, flocks, etc., pounds   1,265,038	1,265,038	125,804	495,173	141,625	*	*	*	*	*	×	*	*
Shawle	*	*	*	*	*	*	*	*	*	*	*	*
Yarns, pounds	192,826	151,035	284,393	233,704	*	*	*	*	*	*	*	*
All other	:	582,568		678,430		1,309,850	•	1,082,157	:	980,662	:	1,053,695
Total				18,102,460		23,532,175		18,509,791 14,912,619 16,318,141		14,912,619		16,318,141

\* Included in "All other."

# IMPORTS OF WOOL AND MANUFACTURES OF WOOL ENTERED FOR CONSUMPTION.

The figures in the table on page 128, showing the imports of foreign wools and the manufactures of wool entered for consumption during the fiscal year, differ from those in the tables of gross imports and must not be confused with them. Only those quantities which go into consumption are included in the former, while in the tables of gross imports, all imports, those entered in bond as well as those entered for immediate consumption, are embraced.

The duty paid value of the imports of wool is \$43,786,001 and of all manufactures of wool, including wool partially manufactured and not specially provided for, \$27,325,221, making the total duty paid value of wool and its manufactures, \$71,111,222.

#### LONDON SALES.

The fifth and last series of the London sales of Colonial wool for 1912 began November 26 and closed December 7. The net amount available was 100,000 bales, of which 98,000 were sold, leaving 2,000 to be carried over into this year. The distribution was as follows:

Home consumption	50,000 bales.
Continent	47,000 "
America	1,000 ''
Carried over	2,000 ''

The following statement shows the supplies and deliveries of Colonial wool in the London market for the first five series of 1913, as compared with the first four of 1912:

London Market.	1912.	1913.
Held over from December previous year  Net Imports for the first 5 series of	10,000 bls.	2,000 bls.
1913, and the first 4 series of		
1912	797,000 ''	695,000
	807,000 bls.	697,000 bls.
Home Consumption 471,000 bls.	410,000 bls.	
Continent " 288,000 "	231,000 ''	
America " 41,000 "	20,000 ''	
Total sold (first-hand wools)	800,000 bls.	661,000 bls.
Held over	7,000 bls.	36,000 bls.

The net imports amounted to 695,000 bales, and as there were 2,000 bales held over from last year, the total available supply was 697,000 bales. The quantity available for each sale and the destination of the purchases are shown in the table which follows:

LONDON SALES - COLONIAL WOOL, FIRST FIVE SERIES, 1913 - BALES.

	Available.	England.	Continent.	America.	Total Sales.	Held Over.
	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.
Jan. 1, 1913						2,000
Jan. 14–29	135,000	78,000	43,000	9,000	130,000	5,000
March 4-19	160,000	84,000	46,000	4,000	134,000	26,000
April 22-May 7	187,000	100,000	45,000	1,000	146,000	41,000
July 1-15	176,000	68,000	41,000	2,000	111,000	65,000
Sept. 23-Oct. 1	176,000	80,000	56,000	4,000	140,000	36,000
		410,000	231,000	20,000	661,000	

The total sales for the five series were 661,000 bales distributed as follows: to England, 410,000 bales; the Continent, 231,000 bales; to America, 20,000 bales, and 36,000 bales were held over for the next series, which began November 25, the entries closing November 17, with 144,000 bales available for the series, of which 140,000 were of the new Australian clip.

Messrs. Helmuth Schwartze & Co. comment upon each of the series of London sales as follows: Of the first series, which commenced January 14 and closed on the 29th, they say:

There was a good attendance and the tone was strong all through. At the opening wool sold well on a par with the closing rates of December. As the sales continued prices hardened and wool generally may be quoted about 5 per cent over December.

The second series commenced March 4 and continued till the 19th:

These sales have been well attended and the tone has been good.

As compared with the previous sales merino wool may be quoted, on the average, at from par to 5 per cent dearer. The advance is seen particularly in good medium grease and in

medium and inferior secureds, which are mostly 5 per cent over January level.

Fine crossbreds are well on a par, medium wools from par to 5 per cent dearer, as compared with January. Very coarse wools at first sold at 7½ per cent over the previous sales but have given way a little and are now only 5 per cent dearer.

The third series occupied from April 22 to May 7:

The sales opened with a large attendance and a very good tone. The better classes of merino wools are well maintained, and inferior parcels and all crossbreds are about on a par with closing rates of last series.

The fourth series began July 1 and closed July 15:

There was only a moderate attendance, but competition has been fairly animated, and good wools especially have met a strong demand.

Taken all round prices for merino have shown no great change. Really good wools, both grease and scoured, have sold fully on a par with last sales close, sometimes even at a fraction above. The bulk of ordinary seoureds, too, has sold at about May level, but inferior grease and the average run of top-makers' wools showed a decline of 5 per cent.

The fifth series for the year 1913 commenced September 23 and closed October 8. The total available amounted to 176,000 bales of which 140,000 bales were sold and 36,000 carried over to the next series:

There was a very fair attendance of buyers all through the series, with good general competition and a firm tone.

The net result of these sales is a slight hardening of prices as

compared with July.

Merino grease has sold on a par with last series, except in the case of heavy-conditioned wools of doubtful yield, which showed some weakness. Scoureds of all descriptions have met with a very strong demand, and sold for the most part at 5 per cent above July level.

Among greasy crossbreds the initial weakness in the fine and medium qualities soon disappeared and they are now fully on a par with July. Coarse greasies, which opened at July level, have hardened and are now 5 per cent dearer. Scoured crossbreds and slipes also sell at July level, the opening decline in the fine and medium qualities having quite disappeared.

The preceding statements refer only to the London market. Adding the transit wools and the direct imports, the total

deliveries to	the	${\it trade}$	as	stated	by	Helmuth	${\bf Schwartze}$	&	Co.
are as follow	s:								

Distribution of Colonial Wool through England and direct.	Total Season. 1912,	Total Season. 1911.	Five Series. 1913.	Four Series, 1912.
Sold to England	Bales. 1,055,000 1,778,000 101,000	Bales. 1,086,000 1,760,000 52,000	Bales. 967,000 1,457,000 50,000	Bales. 982,000 1,642,000 99,000
	2,934,000	2,898,000	2,474,000	2,723,000

The deliveries show a net decrease of 249,000 bales. The home trade took 15,000 bales less and the Continent 185,000 bales less than in the preceding year. The American trade was 49,000 bales less than last year. As compared with the corresponding series in the preceding year, 50,000 bales were held for America as against 99,000 bales in 1912, a decrease as stated of 49,000 bales. In 1910 America took 125,000 bales in the corresponding series.

Buxton, Ronald & Company in their Annual Wool Report, from which we quote, sum up the season's business as follows:

Market conditions it is true have been again of a somewhat trying character, but it has been a most opportune occurrence that the home trade during the last twelve months has been so good, and in a measure able to surmount the lack of Continental demand which has been customarily in evidence. The trend of events in the Near East, with the possibility, at any rate, of very serious international complications at one time, whilst injuring to a great extent the export of yarns from this country was felt to a much more serious degree in France and Germany, where the commercial and financial strain was undoubtedly very great. The position of affairs in the United States likewise was unsettling with the fate of the tariff revision so long in suspense. Business with that quarter was for some time reduced to an absolute minimum, and a very important outlet for wools was more or less closed. In spite, however, of these handicaps, values have all been in favor of the producer, a fact which speaks eloquently for the sound basis on which the wool growing industry stands. Last year's losses in Australia, South Africa and South America made a by no means negligible diminution in the world's wool supplies, which are now by common consent

recognized as being none too large to cope with an ever increasing demand. Trade must fall away to some considerable extent, or a new source of supply must be tapped before the balance between supply and demand can be reversed. It is probable that from the three countries referred to above some increase in last year's quantities may be available, the seasons in the first two at least having been more favorable, but there are no indications of any important fresh sources of supply being opened up. in fact evidence points the other way and rather to the bringing under the plough of many thousands of acres which a short while back were given up to sheep raising. As far as trade is concerned it is not improbable that after these years of great activity some easing off may be experienced at any rate in this country. Against this the industrial position on the Continent is improving, more especially in France, and better things are looked for consequent on the end of the Balkan war. Then again another element in the situation calling for special mention is the trade policy of the United States of America, where the ultra protective rôle, which had indeed become almost a fixed tradition, has been lately abandoned. When a nation of well over ninety millions of inhabitants decides on a fundamental alteration in its fiscal policy, the changes involved attain almost the proportions of a revolution. Pending the final enactment everything is uncertain, enterprise is naturally checked, and manufacturers' productive capacities reduced to the lowest ebb. With a settlement arrived at, effect to which will be given in a few weeks, what more natural than to expect a revival of confidence and that the deferring of ordinary requirements will ultimately impart a stimulus to trade? There are already signs of improvement. It, however, remains to be seen which will be the more profitable article to import, raw wool or tops, but that the revised tariff will be to the benefit of foreign woolgrowers as a whole admits of no doubt. The world's wool supplies will be called on to an even larger extent than hitherto. With these satisfactory prospects in front of them, growers can regard the marketing of their wool with confidence. Buyers on the other hand are faced with a rather high basis of values, from which prospects of being able to improve on last year's somewhat indifferent results appear to be rather meager.

The values of both merinos and crossbreds finished up the twelve months on a very satisfactory basis, at any rate from the growers' point of view. The trade would much appreciate a lower range of values and are eagerly looking for it, but with supply and demand so evenly balanced there does not seem much

chance of any great relief being experienced.

 $Supply. \begin{tabular}{ll} Merino. \\ Supply. \begin{tabular}{ll} The quantities catalogued were as follows: \\ \end{tabular}$ 

Descriptions.	1913.	1912.	1911.	1910,	1909.
	Bales.	Bales.	Bales.	Bales.	Bales.
Australian	347,500	431,800	448,700	376,200	466,500
New Zealand	20,100	27,400	27,900	33,300	35,400
South African	35,200	43,000	45,100	41,000	44,900
Total	402,800	502,200	521,700	450,500	546,800

Australasian. — Character and selection. — There is unfortunately only one criticism which can be fairly applied to the 1912-13 clip, and that is that it was a very indifferent one. With but few exceptions the clip showed severe traces of the dry weather conditions under which it had been grown. Poor as the clip was it promised, however, at one time to be even poorer, but rain came most opportunely to the relief of pastoralists up and down the country. Had it been delayed still longer, a very serious situation would undoubtedly have been created.

The following are the quotations for an average super 60s top during the past two years:

AUSTRALASIAN 60s Tops.

	Jan.	Feb. March.	April.		July.	Aug.	Sept.	Oet.	Nov.	Dec.
1912	1	$\begin{array}{c c} d. & d. \\ 24 & 24\frac{1}{4} \\ 29\frac{1}{2} & 29\frac{1}{2} \end{array}$		l. d.	d. 261 283	$\begin{array}{c} d. \\ 26\frac{1}{4} \\ 28\frac{1}{4} \end{array}$	d. 26½ 28¼	$\frac{d}{26\frac{1}{2}}$	d. 27	d. 28

South African wools have again figured prominently in the catalogues. The clip generally was not a good one — in fact, if the truth be told, it was just about the worst that has been seen for many a year. There were, indeed, but few clips which did not show signs of the droughty conditions which had prevailed for so many months. In the Western district times had not been quite so bad as in other places, and the wools were in very fair order. One or two really good parcels were sent from this part. 1s. 1d. per pound being the highest price paid; this was for an excellent line, showing color, quality and length, and, at the same time, good weight-cutting fleeces, providing a striking example to the Mossel Bay and Caledon growers, whose clips

were again most irregular in length. An improvement in the market preparation as well as in the fleeces from these two last-mentioned districts is still awaited. Midland wools were in fair average condition, some of the Kaffrarians were good and well up to the average, but others again were heavy.

The market throughout was a difficult one, and at no time can it be said that it was easy to clear the offerings. Straight consigned growers' clips moved freely enough at the market rates of

the day, but dealers' lots often hung fire.

The following figures showing the prices ruling for South African wools through the past twelve months are interesting, if only on account of the improvement which, in face of the decline in greasy wools, has taken place in snow whites. The demand for this article has been excellent, and an advance of something like 20 per cent has been registered.

	Wester	n Cape.	ALGOA	BAY.
SERIES.	Grease.	Scoured.	Grease.	Scoured.
December, 1912 January, 1913 March, " April, " July, " September, "	$\begin{array}{c} d. \\ 10\frac{1}{2}-11\frac{1}{2} \\ 11-11\frac{1}{2} \\ 11-11\frac{1}{2} \\ 11-11\frac{1}{2} \\ 11-11\frac{1}{2} \\ 11-11\frac{1}{2} \\ 11-11\frac{1}{2} \end{array}$	$\begin{array}{c} d.\\ 21\frac{1}{2}-22\frac{1}{2}\\ 22-23\\ 22\frac{1}{2}-23\frac{1}{2}\\ 22\frac{1}{2}-23\frac{1}{2}\\ 23-24\\ 23\frac{1}{2}-24\frac{1}{2} \end{array}$	$\begin{array}{c} d. \\ 9\frac{1}{2} - 10 \\ 9\frac{1}{2} - 10\frac{1}{2} \end{array}$	$\begin{array}{c} d. \\ 19\frac{1}{2} - 20\frac{1}{2} \\ 20 - 21 \\ 21 - 22 \\ 21\frac{1}{2} - 22\frac{1}{2} \\ 22\frac{1}{2} - 23 \\ 22\frac{1}{2} - 23\frac{1}{2} \end{array}$

	East Lo	ONDON.	NATAL.		
SERIES.	Grease.	Scoured.	Grease.	Scoured.	
December, 1912 January, 1913 March, April, July, September,	$d. \\ 8\frac{1}{2} - 9\frac{1}{2} \\ 9 - 9\frac{1}{2} \\ 8\frac{1}{2} - 9 \\ 8\frac{1}{2} - 9 \\ 8 - 9 \\ 8 - 9$	$\begin{array}{c} d. \\ 18 & -19 \\ 19 & -20 \\ 20 & -21 \\ 20\frac{1}{2} - 21\frac{1}{2} \\ 21 & -22 \\ 21\frac{1}{2} - 22\frac{1}{2} \end{array}$	$\begin{array}{c} d. \\ 7\frac{3}{4} - 8\frac{1}{4} \\ 8\frac{1}{4} - 8\frac{1}{2} \\ 7\frac{3}{4} - 8 \\ 7\frac{3}{4} - 8 \\ 7\frac{1}{4} - 7\frac{3}{4} \\ 7\frac{1}{2} - 7\frac{3}{4} \end{array}$	$\begin{array}{c} d. \\ 17\frac{1}{2} - 18\frac{1}{2} \\ 18 - 19 \\ 19 - 20 \\ 19 - 20 \\ 20 - 21 \\ 20\frac{1}{2} - 21\frac{1}{2} \end{array}$	

Reference must also be made to the high prices ruling for coarse whites, blacks, grays and coarse and coloreds. 1s. 6½d. has been readily paid for the first named, and the Continental demand has all along been very keen for the different qualities and shades.

#### CROSSBREDS.

Supply. — The quantities catalogued from Australia and New Zealand show a total deficit of about 62,000 bales:

Descriptions.	1913.	1912.	1911.	1910.	1909.
	Bales.	Bales.	Bales.	Bales.	Bales.
Australian	55,600	74,000	59,600	52,200	51,200
New Zealand	352,000	395,600	380,000	341,300	390,400
Totals	407,600	469,600	439,600	393,500	441,600

The New Zealand clip was a good average one. The first arrivals from North Island showed up in excellent condition and gave promise of a better article than eventually proved to be the case, as the bulk of the wool marketed later on in the year contained a good deal of seed, and was, moreover, heavier in condition. The condition of the South Island output was more regular. Really coarse wool was rather hard to find, and is a diminishing quantity.

With the exception of a fall in prices during the early spring consequent on the cessation of buying by Americans, the market was singularly free from anything in the nature of violent fluctuations, and from the beginning of the year, save for a short period in March, the price of a standard 40s top has scarcely varied more than \( \frac{3}{4}d \), per pound. Nevertheless topmakers have not by any means had an easy time, as the price of wool has been relatively fully as high or higher than tops. Spinners, however, were more favorably situated, and on the whole must have had a good time.

#### SLIPED WOOLS.

The supply of these was the largest on record amounting to 75,000 bales. Notwithstanding this an excellent demand was seenred all through, and it was only late in the season that some slight weakness was apparent. The condition as a rule was well up to the average, save in some cases where the relatively poor get up was attributable to the strike in the freezing works during the early spring. The supply during the past five seasons has been as follows:

1913.	1912.	1911.	1910.	1909
Bales.	Bales.	Bales.	Bales.	Bales.
75,000	70,000	60,900	61,000	73,000

#### LIVERPOOL EAST INDIA WOOL SALES.

Messrs. Hughes & Isherwood report the Liverpool East India wool sales for the six series of 1913 in bales as follows:

January.	March.	May.	July.	September.	November.	Bought by
3,950	2,650	1,100	900	4,000	2,700	America.
7,720	7,450	6,550	10,000	8,500	7,000	Continent.
15,401	16,952	18,380	12,116	15,881	17,908	Home trade.
27,071	27,052	26,030	23,016	28,381	27,608	Total sold.
9,042	21,000	12,242	6,301	13,845	7,702	Withdrawn.
36,113	48,052	38,272	29,317	42,226	35,310	Bales offered.

In their market reports of the sales they make the following comments on each series:

## January 24, 1913.

In all the home consuming districts business continues remarkably good, and orders are booked which ensure machinery being fully employed for several months. On the Continent the same state of affairs—although not to so marked an extent—prevails. In the United States mills are not running full time, or at a profit, and stocks of wool there that compete with East India growths are by no means large. In view, however, of the considerably reduced duties which the new tariff is confidently expected to show, operations in the raw material are naturally confined to the supplying of immediate and pressing wants.

#### Макси 21, 1913.

It had for some time past been foreseen that, whenever there should be an unusually large supply available, the ever increasing quantity of dirty wool coming forward from India would be strongly discriminated against, and that shippers of such stock would be badly caught. This is exactly what has happened this time: with a record offering users were largely independent of the mass of dirty and sandy wool in the catalogues, and in consequence such stuff not only marked a substantial decline, but for much of it no reasonable offers were forthcoming. It forms the great bulk of the withdrawals (21,000 bales), and the outlook for it is decidedly gloomy.

In all the home consuming districts business continues satisfactory, but from the north of France reports are not so favorable. In the United States interest centers on the proposed tariff changes, regarding which nothing certain is yet known

either as to the shape the new duties on wool will finally assume or when they will come into operation. Users are, therefore, naturally acting with great caution.

May 30, 1913.

At the close of the March series we drew special attention to the gloomy outlook for dirty and sandy wool; and the correctness of that view has been proved by the fresh decline of 5 per cent that it has now had to submit to. Many firms who bought some of it months ago were very badly taken in and have made up their minds never to touch it again. All this, of course, has helped shippers of clean, properly got-up wool, which was not in excessive supply and many growths of which therefore gained 5 per cent or more. Trade is only fairly satisfactory on the Continent, but in this country every branch using East India wool is as busy as can be.

July 31, 1913.

In the interval that had elapsed since May the general market had been adversely affected by the renewal of hostilities in the Balkans, by dear money and by weariness at waiting for a settlement of the tariff question in America. But the various branches of trade in which East India wools are used, both in this country and on the Continent, had continued busily employed; and it soon became evident that the supplies secured by many users at our May auctions were insufficient for their requirements. Week by week they were in the market, taking good quantities of the held-over lots at full prices; and so the belief became pretty general that, notwithstanding that most other wools had declined 5 to 10 per cent, East India descriptions (of which the supply was moderate) at last week's auctions would, on the average, just about hold their own. Nobody, however, foresaw in the decision of France to increase her army the creation of an influence likely to have an important effect on the course of the series. For the additional number of men wool mattresses have to be provided, and for these it was decided that large quantities of East India wool were necessary. This — and this alone explains the advance that has taken place, and no support from this altogether exceptional source need be looked for in September.

Остовек 3, 1913.

In July a French Government order absorbed several thousand bales and drove up prices 5 to 10 per cent. Last week — with no such extraneous support and a much larger offering — it was expected that a good deal of that gain would be lost. As a matter of fact, however, prices have shown very little change — because everybody had had to go short of wool two months ago and was very hungry for it now. Moreover the imminence of "Free

Wool" in the United States led to several American users sending over some fair sized orders for various kinds of stock, which included wools from 6d. to 9½d, such as they have not been able to touch during the sixteen years that the existing duties have been in force. This gave a good deal of backbone to the market, and—to a large extent—neutralized the effect of the very heavy supply we had to deal with.

The fifth series of Liverpool sales of East India wools, Turkish mohair, alpaca, etc., is commented on by Messrs. Thomas & Cook as follows:

The heavy supply of wool for these auctions, together with the somewhat quieter state of trade for the manufactured article, caused some misgiving as to their effect upon values, but the result, taking all things into consideration, has perhaps rather exceeded the expectations of sellers. Although poor and defective wools were much in evidence, the offerings on the whole were fully an average in character, the only exception being yellows, which were scarce throughout. Joria whites were hardly up to the standard in quality or condition, but Vicanere and Kandahar whites were rather above the average in this respect, and these and all other good clean wools were in good request, and assisted by an improved American demand, sold freely at prices fully up to those current at the July sales, with a fractional advance at times on best white Vicaneres. Gray wools were also in good request at firm rates, but poor and wasty parcels were again a dragging sale, and difficult to move at, in some cases, quite 5 per cent below last auction currencies. It is estimated that about 7,920 bales were taken for the Continent, and 3,450 bales for America, as against 9,600 bales and 900 bales respectively in July. Home trade buyers secured about 15,260 bales as compared with about 11,640 bales at the last series. The withdrawals totalled 15,600 bales, largely consisting of highly limited and poor wasty parcels.

EGYPTIANS were in good request, the bulk of the offerings passing the hammer at prices par to \(\frac{1}{2}\) d. per pound over those current at the last sales, with the exception of dark colors, which were a little easier, and extra whites which were neglected, and mostly withdrawn. Oportos also met with good competition, and practically all sold at firm rates, while a fair proportion of the Syrians found buyers on the same basis, but the Russian and Georgian wools were passed for want of competition, there being little or no bidding for these descriptions.

ALPACA. — The demand for fleece since the date of our last circular has been on a restricted scale, as users have had little encouragement in trade for the manufactured article to warrant their operating beyond actual requirements, while the strike of sorters has prevented their putting the wool freely into use, and

they have therefore been content to pursue a hand to mouth policy and cover their wants as they arose, so that only occasional transactions have been possible at prices which have tended somewhat against sellers. As we write, however, a little more enquiry has been experienced for Arequipa fleece, but as yet actual transactions have not been important. A moderate business has been done in secondary lots of fleece at rather lower prices, but most sorts of inferiors have continued in fair request but without much change in values.

Turkey Mohair. — There has been little or no movement in this article during most of the period under review so far as average lots are concerned, new business in "Yarns" having been scarce, while the labor troubles in Bradford also hindered its free handling, so that sales were exceedingly difficult to effect, and little actually changed hands, but values remained nominally steady. Rather more enquiry is being experienced for average lots, although as yet the demand is by no means general, but with the sorters' strike ended the outlook is a little more hopeful than of late. Inferior descriptions have been in moderate request, but business has been difficult to do owing to the high pretensions of holders.

#### ANTWERP AUCTIONS.

The Antwerp Wool Sales were held on the following dates: 1st series, January 8; 2d series, February 28; 3d series, April 18; 4th series, June 27; 5th series, September 19; with sales reported by Messrs. Fuhrmann & Co. as follows:

RIVER	PLATE	WOOLS.

	1st Series.	2d Series.	3d Series.	4th Series.	5th Series.
	Jan. 8.	Feb. 28,	April 18.	June 27.	Sept. 19
	Bales.	Bales.	Bales.	Bales.	Bales.
Buenos Ayres	73	368	1,870	727	1,294
River Plate (slipes)	241	41		<b></b> .	122
Punta Arenas	<b></b>			5	250
Montevideo	1,253	1,059	1,166	1.131	1,122
Concordia				256	455
Entre Rios	175			12	10
Rio Grande	5	157		258	274
Chile					134
Fray Bentos					
Total River Plate	2,001	1,625	3,036	2,389	3,661

ALL OTHER WOOLS.

	lst Series.	2d Series.	3d Series.	4th Series.	5th Series.
	Jan. 8.	Feb. 28.	April 18.	June 27.	Sept. 19.
	Bales.	Bales.	Bales.	Bales	Bales.
Australia	6	102	54	51	91
Cape		7		13	3
Africa			1		
Spain		764	9.0		51
South West Africa		6	36		-
Turquic					47
Total sundry	170	879	90	116	200

Messrs. Fuhrmann & Co. in their circular of September 19, 1913, quote prices as follows:

	Pence.
Extra Montevideo merino 1a combing	25
Very good Montevideo merino la combing	248
Good Concordia and Rio Grande 1a combing	$23\frac{1}{2}$
Medium Chebut 1a combing	23
Montevideo crossbreds 58s	214
Montevideo crossbreds 56s	$19\frac{7}{8}$
Montevideo crossbreds 50s	184
Montevideo crossbreds 46s/48s	17
Montevideo crossbreds 44s	$15\frac{1}{2}$

Table XVII. shows the imports into Europe of these wools for a series of years. The business is done between July 1 and April 30 of the succeeding year. The importations have increased 73,000 bales over last year, being 395,000 bales against 322,000, of which increased importation 20,000 bales came from Montevideo. Notwithstanding this increase in shipments to April 30, Messrs. Wenz & Co. anticipate that comparative figures for September 30 will show a decrease in production as compared with the preceding year.

Table XVII. — Imports of River Plate Wools into Europe between July 1 and April 30 Succeeding, 1894 to 1913 Inclusive. 1

In thousands of bales.

Year.	Dunkirk.	Ḥavre.	Antwerp.	Bremen.	Ham- burg.	Other Ports.	Total.	Of which from Monte- video.
1894	149	14	68	38	56	15	340	34
1895	133	7	78	36	46	30	330	45
1896	195	20	90	50	<b>5</b> 0	35	440	70
1897	161	11	76	33	58	12	351	35
1898	163	8	80	80	81	56	468	80
1899	221	14	71	45	81	29	461	54
1900	169	8	67	50	61	33	388	45
1901	94	16	52	29	44	35	270	55
1902	208	12	79	34	89	78	500	54
1903	172	9	62	35	65	67	410	51
1904	149	8	58	38	70	48	371	41
1905	132	6	70	35	70	68	381	45
1906	138	33	56	28	73	85	413	56
1907	132	19	55	19	93	71	389	46
1908	121	30	54	16	79	57	357	53
1909	217	5	84	23	111	100	540	110
1910	135	11	58	15	86	63	368	83
1911	110	4	50	24	82	59	329	65
1912	98	6	51	22	67	78	322	70
1913	131	4	52	28	93	87	395	90

<sup>&</sup>lt;sup>1</sup> Wool circular of Wenz & Co., Reims, May, 1910.

Table XVIII. contains a statement of the production of River Plate wools for a period of seventeen years, the productive season extending from October 1 to September 30 following.

TABLE XVIII.

	A	RGENTIN	Α.	τ	JRUGUAY	•	GRA	AND TOT	ALS.
SEASON OF	Quan- tity.	Ave. weight, Bales.	Total weight.	Quau- tity.	Ave. weight, Bales.	Total weight.	Quan- tity.	Ave. weight, Bales.	Total weight
			Metric			Metric			Metric
	Bales.	Kilo.	Tons.	Bales.	Kilo.	Tons.	Bales.	Kilo.	Tons.
	$\alpha$ .	b.	a.c.	a.	b.	a. c.	a.	<i>b</i> .	a. c.
895-96	443.0	380	168,3	100.0	466	46,6	543,0	396	214,9
896-97	486,0	412	200,3	88,0	466	41,0	574,0	420	241,3
897-98	495,0	417	206,5	90,0	466	42,0	585,0	424	248,5
898-99	487.0	425	207,2	81,0	469	38,0	568,0	431	245,2
899-00	465,0	429	199,4	85,0	470	40,0	550,0	435	239,4
900-01	405,0	445	181,0	86,5	471	40,8	491,5	451	221,8
901-02	444,0	445	197,6	86,0	470	40,4	530,0	449	238,0
902-03	481,0	412	198,4	104,0	471	49,0	585,0	422	247,4
903-04	416,0	420	174,7	86,0	470	40,4	502,0	428	215,1
904-05	411,0	417	171,2	82,5	472	38,9	493,5	425	210,1
905-06	395,0	417	165,0	90,5	450	40,7	485,5	423	212,9
1906-07	389,0	417	162,2	99,0	454	44,7	488,0	424	206,9
1907-08	427,0	417	178,0	110,0	460	50,6	537,0	426	228,6
1908-09	438,0	415	182,0	126,0	459	57,8	564,0	425	239,8
1909-10	359,0	413	148,4	123,0	458	56,4	482,0	424,8	204,8
1910~11	394,0	409	161,0	134,5	458	61,6	528,5	421	222,6
1911-12	361,0	409	147,7	155,5	458	71,2	516,5	424	218,9

Two 00 omitted, thus 443.0 = 443.000.

Of the season in Buenos Ayres and Montevideo, Messrs. Wenz & Co. say in their Circular of May, 1913:

#### BUENOS AYRES.

Weather conditions being favorable for shearing, arrivals commenced a fortnight earlier than last year, and, about the middle of October, supplies in the Central Market permitted a fair turnover at rates that showed an advance of fully 15 per cent on those of the previous season.

Wool came forward rapidly and found a ready market with French and German buyers. By the end of October, prices had advanced 2 to 3 per cent, low crossbreds meeting with the most enquiry in anticipation of an American demand. A week later, prices were rather easier, particularly for faulty wools, which began to accumulate; but very soon general competition gave a new impetus to the market, occasioning a further rise in prices.

b. Kilo equals 2.2046 pounds.
c. Metric ton equals 2,204.6 pounds.

 $<sup>^{1}</sup>$  Exclusive of local consumption, which may be put at 6,000 tons (14,500 bales) for the Argentine Republic and 1,150 tons (2,500 bales) for Uruguay.

In December there was some hesitation, but the year closed at an advance of 5 per cent on opening rates.

In January supplies began to fall off; competition thereupon became very keen, and by the middle of February, when the season was drawing to a close, a new advance of 5 per cent had been registered.

Lambs' wool met with less demand than usual. Prices aver-

aged 15 to 20 per cent above those of the previous season.

Entre Rios wools were again slow of sale until January, when, supplies from other districts falling off, they met with brisk enquiry for Continental account, Germany taking the bulk of the

offerings.

The clip was inferior to its predecessors, Southern wools, irregular in growth, contained a fair amount of burrs and a lot of beans, Northern, Western and South Western wools were thin and fatty. Pasto fuerte merino from the Pampa and Patagonia were denser, finer, and better conditioned than usual. Entre Rios wools lacked staple and were rather faulty.

Bahia Blanca.—Rapid arrivals combined with a large and steady turnover were the features of the season. Early in October there was a lively market, France being chief buyer; Germany soon joined in, paying particular attention to merinos. Prices both for merinos and crossbreds were 15 per cent above those of the previous season, and rose steadily untilthe middle of November, then showing a further advance of 5 per cent. The market became rather easier in December, but rose sharply in January to well above November rates. By the end of the month the season was practically over.

The clip was a fairly good one: crossbreds were well grown and soft, merinos fine and of good staple, but both showed a fair amount of yolk, burrs, and beans. Lambs were very good and met with keen enquiry.

Imports of Uruguayan Wools into the United States for the Years
1904-1913 inclusive.

Fiscal Year.	Class I.	Class II.	Class III.	Total.
	Pounds.	Pounds.	Pounds.	Pounds.
1904	112,208			112,208
905	7,044,752	619,377	76,180	7,740,309
906	5,083,195		3,995	5,807,190
907	5,856,437		174	5,856,611
908	1,604,221			1,604,221
909	5,759,852		108,380	5,868,232
910	8,768,627		21,158	8,789,775
911	711.525		· · · · · · · · · · · · · · · · · · ·	711,525
912	3,125,759		91,229	3,216,988
1913	3,537,824		181,049	3,718,873

#### MONTEVIDEO.

Arrivals commenced early in October, and were in full swing by the end of the month. The clip showed good condition, was light and free, but lacked staple. Growers finding prices satisfactory, and buyers being keen to operate, heavy transactions resulted and were maintained without interruption until the end of the season.

Merinos fluctuated but little throughout the season. A few medium and ordinary wools changed hands early in October on the basis of 23-231d. clean.

Crossbreds met with keen inquiry throughout the season at Buenos Ayres rates.

#### DALGETY'S REVIEW.

This valuable review came to hand as usual, and while as a news item attention would naturally have been given to it in the September number of the Bulletin, it was thought best to defer noticing it at that time and to use it in connection with this Annual Wool Review.

As usual large demands have been made upon it and numerous extracts taken, but because of the impossibility of reproducing the complete report these extracts have been selected from various portions and rearranged so far as possible under related heads. The sequence, therefore, is not the same as in the original publication.

# THE DEPLETION OF THE FLOCKS AND THE DEMAND FOR MUTTON.

There is one clear outstanding fact in connection with wool interests, which is that consumption has already overtaken production. Supplies will not be large during the ensuing wool year, though there will be some moderate increase in production from Australia, despite the terrible mortality amongst grown sheep, and poor lambing during the year 1912. A point well worth noticing is that sheep slaughterings for home consumption and export have reached such dimensions that it will be many years before the flocks of Australia can be built up again to anything like former numbers. The frozen meat industry is proving a very profitable one, and is sure to expand, and especially so when the doors of either, or both, the United States and Germany are thrown open for the free reception of Australasian meat, which is assured of a demand which it will be impossible to supply if we do not rob Peter to pay Paul by slaughtering more sheep than we should do. Already it is a regrettable fact that both in New Zealand and Australia a heavy proportion of ewes and ewe lambs is being killed annually for export — a practice which if continued will exert a very unfavorable influence on Australasian pastoral interests.

The sheep slaughterings for export and local consumption throughout Australasia have been 15,649,349 head, as compared

with 19,281,287 head during the preceding year.

Sheep numbers as at the close of the year show the very serious falling off of 9,809,634 head, as compared with the same point twelve months ago, and it will take a succession of good seasons to regain the lost ground. Details as to the number for each State as compared with those returned at the end of the preceding years are as follows:

NUMBER OF SHEEP AT CLOSE OF YEAR IN AUSTRALASIA, 1908-1912.

	1912.	1911.	1910,	1909.	1908.
New South Wales	39,436,118	45,032,022	45,825,308	46,194,178	43,329,384
Victoria	11,892,224	12,857,804	12,937,983	12,937,983	12,545,742
Queensland	20,248,580	20,387,838	20,153,239	19,593,791	18,348,851
South Australia	5,481,487	6,267,477	6,432,038	6,898,450	6,829,637
West Australia	4,593,458	5,408,583	5,157,658	4,692,419	4,098,500
Tasmania	1,800,000	1,788,310	1,735,000	1,728,053	1,744,800
Australia and Tasmania	83,451,867	92,742,034	92,241,226	92,044,874	86,896,914
New Zealand	23,750,153	24,269,620	23,792,947	23,480,707	22,449,053
Total	107,202,020	117,011,654	116,034,173	115,525,581	109,345,967

When the first stock census was taken in 1788 the number of sheep in the country totalled 29 head; by the year 1891 there were no less than 124,547,937, which stands as the record. The figures in recent years have been materially reduced by drought and heavy slaughterings, and latest returns give the numbers as 83.451,867 head. It will be many years before Australia carries 124,000,000 sheep again, if indeed those numbers are ever reached; but though there are many millions of finer sheep in the country than prior to the big 1900–1902 drought, and fewer than at any period since the year 1907, the amount of wool produced per head is very much greater than formerly.

The development of the wool-producing industry in Australia has been a remarkable one, and almost from the first sheep have been the principal assets, as they are to-day in both Australia and New Zealand. Sheep are responsible for just about half of

the total wealth produced in Australasia.

The following particulars taken from official returns show the number of sheep to the square mile in the various Australian States and New Zealand, also the number of sheep per head of population, viz.:

TABLE XIX.

	Number of Sheep.	
	Per Square Mile.	Per Capita of Population.
ew South Wales	127.0	22.2
ictoria	135.0	8.61
ueensland	30.2	31.8
outh Australia	14.4	12.7
Vest Australia	4.7	<b>15</b> 0
asmania	68 7	9.1
ommonwealth	28.0	17.6
New Zealand	230.6	21.1
ustralasia	34.8	18.3

## PRODUCTION, EXPORTS AND SALES.

The importance of the Australian wool auctions is shown in the following table, from which it appears that the percentage of sales in the home market has increased from 53 per cent in 1898-99 to 80 per cent in 1912-13, while the actual quantity sold has more than doubled during the period.

TABLE XX. - AUSTRALASIAN EXPORTS AND SALES.

Season.	Total Exports.	Sales.	Sales to Exports
	Bales.	Bales.	Per cent.
1898-9	1,664,517	890,185	53
1899-0	1,594,464	915,877	57
1900–1	1,609,713	808,912	50
1901–2 –	1,664,885	1,035,520	62
902-3	1,440.722	861,174	60
903-4	1,366,942	837,497	61
904-5	1,595,734	1,092,651	68
905-6	1,869,455	1,354,865	72
906–7	2,090,188	1,537,798	74
1907-8	2,057,831	1,351,121	66
908-9	2,288,104	1,657,906	72
909-10	2,434,643	1,889,745	77
910-11	2,468,750	1,865.167	76
911-12	2,537,867	1,926,926	76
1912-13	2,247,265	1,804,801	80

The average weight per bale of the past clip as dealt with in Australasian markets is 321.2 pounds, as against 331.2 pounds for the previous year, 332.1 pounds for 1910–11, 335.5 pounds in 1909–10, 330.6 pounds in 1908–09, 333.7 pounds in 1907–08, and 339.7 pounds in 1906–07.

It will be seen that the decreased average weight of the bales during the past wool year has been 10 pounds, whilst compared with six years ago the decrease in weight is no less than 19.7

pounds.

Now that rail freight is almost universally charged at per ton and oversea freight at per pound, and not at per bale, there is nothing to be gained by pressing too much wool into a bale; but, on the other hand, it is a mistake to make the bales too light. The tendency to make light bales has become most marked of late years, and it will surprise many to know that a fair proportion of the bales now marketed, especially of light-conditioned crossbred wool, do not weigh even 200 pounds gross. As the rule of the trade is that all bales of greasy wool (excepting extra super lambs) in the Victorian markets which do not weigh 200 pounds must be sold separately from the rest of the clip, growers should bear this in mind.

#### PRODUCTION.

The total quantity of wool exported has been 2,247,265 bales or 721,821,516 pounds, as against 2,537,867 bales or 840,694,748 pounds in 1911–12. To arrive at the actual production it is necessary to add the amount of wool used by manufacturers in Australasia, namely, 87,775 bales or 28,175,775 pounds. The result shows the actual production of wool for the past twelve months to have been 2,335,040 bales or 749,997,291 pounds, as against 2,637,127 bales or 873,549,808 pounds in 1911–12.

#### VALUE OF THE WOOL PRODUCT.

Dividing the number of sheep shorn into the net weight of wool produced, including that used for manufacturing in Australasia, in all 749,997,291 pounds, it will be seen that the average weight of wool produced (including lambs) works out at 7 pounds per head, which compares with 7.46 pounds in 1911–12, and 7 pounds 4 ounces for the two preceding years, 6 pounds 14 ounces in 1908–09, and 6 pounds 9 ounces in 1907–08. Lambs are counted, and 8 per cent of the total quantity was scoured, which, of course, if included in the statistics in a greasy state would increase the weight cut per head. The all-round average price of wool shows a substantial increase as compared with the previous year, being 10.21d. as against 8.53d., and the average monetary return per head of sheep and lambs has been 5s. 83d. as compared with 5s. 3d. in 1911–12, 5s. 5d. for 1910–11, 5s. 10d.

for 1909-10, and 5s. 1d. per head for 1908-09. It is most satisfactory that despite the comparatively small fleeces produced, the return per head is higher than it was in the previous year.

The average price per bale realized for the 1,804,801 bales sold in Australasian markets has been £13–13s. 1d., which compares with £11–15s. 5d. in 1911–12, £12–10s. 4d. in 1910–11, £13–12s. 2d. in 1909–10, and £12–9s. for the past thirteen years.

Calendar Year.	Total Value Wool Exports.	Calendar Year.	Total Value Wool Exports.	Calendar Year.	Total Value Wool Exports
	£	1000	£	1000	£
1881 1891	$\begin{array}{c c} 16,136,082 \\ 24,063,227 \end{array}$	1903 1904	$18,042,873 \\ 21,796,096$	$1908 \dots \dots 1909 \dots$	25,950,912 $33,128,496$
1896	20,433,855	1905	25,203,549	1910	
1901 $1902$	18,936,557 $16,109,026$	1906	29,685,780 $26,768,952$	1911	29,581,874 30,684,531

TABLE XXI. - VALUE, AUSTRALASIAN CLIP, 1881-1912.

The total value of the 1,804,801 bales sold in Australasia during the past season has been £24,642,643; and if that portion of the clip which has been sent direct to London for sale has made a like average, the net gain in wealth to Australasia from wool alone will have amounted to

£30,684,531 for 1912–13, as compared with £29,581,874 for 1911–12, £31,588,936 for 1910–11, £33,128,496 for 1909–10, £25,950,912 for 1908–09, £26,768,952 for 1907–08, and £29,685,740 in 1906–07.

Australasia has exported in seven years £207,399,441 worth of raw wool.

The average number of bales sold in the Australasian markets during the past seven years has been 1,719,066 bales, and the average realization £22,086,002 per annum.

The past clip was composed of 69 per cent merino, and 31 per cent crossbred, a slight increase in the proportion of crossbred as compared with the previous year, when the respective proportions were 72 and 28 per cent. The clip of 1910–11 was composed of merino 74 per cent, crossbred 36 per cent. In 1910 the clip was composed of 76 per cent merino, and 24 per cent crossbred, while in 1908–09 there was 78 per cent of merino and 22 per cent of crossbred.

The comparative failure of the 1912 lambing is revealed by the quantity of lambs' wool sold in Australasia during the past twelve months, which amounted to 65,106 bales as compared with 93,050 bales for the preceding season, 98,314 bales for 1910–11, 108,808 bales in 1909–10, 69,456 bales in 1908–09, and 70,980 bales in 1907–08.

The proportion of lambs to fleece was 4 per cent, as compared to 5 per cent for the two preceding years, and 6 per cent, 4 per cent, 5 per cent, and 7 per cent respectively for the four years before that date.

In point of breadth of fiber the past clip was the finest pro-

duced for very many years.

The coming clip will be well grown, sound and bulky. The fiber will be broader than that of the past clip, and there will be

more yolk and vegetable defect.

The quantity of scoured wool sold in Australasian markets has been 149,611 bales or 8 per cent of the total wool sold, which compares with 144,046 bales or 7 per cent in 1911–12, 160,326 bales or 9 per cent in 1910–11, 195,241 bales or 10 per cent in 1909–10, and 177,877 bales or 11 per cent in 1908–09.

#### THE AVERAGE WEIGHT OF FLEECE.

The following statement shows for a period of seventeen years the number of fleeces per bale and the number of bales to the 1,000 sheep, and demonstrates the increased average weight of the fleece:

TABLE XXII.

Year.	No. of Sheep and Lambs' Fleeces per Bale.	No. of Bales per 1,000 Sheep
1896–7		16.75
1897–8	60.08	16.64
1898-9	59.62	16.76
1899–1900	$\boldsymbol{57.95}$	17.25
1900–1901	55.88	17.89
1901–2	55.42	18.04
1902-3	51.36	19.46
1903–4		17.99
904-5		18.97
905-6		19.89
1906–7		20.13
907-8		18.97
908-9		20.92
909-10		21.51
910-11		21.27
911–12	44.37	22.54
912-13		21.69

#### FREIGHT RATES AND EXCHANGE.

The rates of freight which have ruled throughout the twelve months have been 11/16d. per pound for grease and 13/16d. per pound for scoured to the end of November, and 3/4d. per pound for grease and 7/8d. per pound for scoured from that time until the end of the season. Practically all the wool has been lifted per steamer, and it would appear as though the good old clippers were a thing of the past in the Australasian wool trade.

The rate of exchange on wool drafts was 3/4 per cent during July to October 4th, and then up to October 24th 1 per cent or 1/4 per cent below the rates current during the corresponding period of 1911. From October 24th till November 29th the rate stood at 1\frac{1}{4} per cent, or the same as was in force at the corresponding time in the previous year, but ever since the end of November the rate has been the high one of 1\frac{1}{2} per cent.

The shipment figures from each State compare as under with the previous season:

TABLE XXIII. - AUSTRALASIAN WOOL EXPORTS BY STATES.

States.	1912-13.		1911-12.		
		Net Weight.		Net Weight.	
	Bales.	Pounds.	Bales.	Pounds.	
New South Wales	773,010	$248,\!290,\!812$	897,551	294,445,105	
Victoria	435,795	139,977,354	562,287	184,459,750	
Queensland	254,495	81,743,794.	288,515	94,647,812	
South Australia	164,259	52,759,990	176,985	58.059,929	
West Australia	68,656	22,052,307	76,874	25,218,515	
Гasmania	22,271	7,153,445	18,335	6,014,796	
Commonwealth	1,718,486	551,977,702	2,020,547	662,845,907	
New Zealand	528,779	169,843,814	517,320	177,848,841	
Australasia	2,247,265	721,821,516	2,537,867	840,694,748	

Decrease, 290,602 bales, or 118,873,232 pounds.

The distribution of purchases in Australasia in the past two seasons has been as follows:

TABLE XXIV. - AUSTRALASIAN WOOL SALES, DISTRIBUTION.

	1912-13,		1911-12.	
	Bales.	Per Cent.	Bales.	Per Cent
United Kingdom	612,891	34	529,051	28
Continent	1,041,206	58	1,207,658	63
United States and Canada	40,929	2	65,250	3
Japan, China, and India	22,000	1	25,707	1
Local manufacturers, etc	87,775	5	99,260	5
	1,804,801	100	1,926,926	100

#### AUSTRALIAN SHIPMENTS.

The first shipment of wool from Australia was made in 1808, since then shipments have been as follows:

Year.	Bales.	Year.	Bales.
1810	98	1900	$^{1}$ 1,221,163
1820	422	1905	1,218,969
1830	8,003	1906	1,454,820
1840	44,502	1907	1,663,130
1850	158,558	1908	1,620,890
1860	240,136	1909	1,796,347
1870	673,314	1910	1,921,705
1880	1,054,430	1911	1,975,378
1890	1,509,666	1912	2,020,547
1895	1,802,269	1913	1,718,486

#### AUSTRALIAN PRE-EMINENCE IN WOOL PRODUCTION.

Australia has held pride of place for many years as the greatest wool-producing country in the world. Quantity, however, is not everything, and pastoralists are to be congratulated because they have produced the best and highest-priced wool in the world, and have, what is still more important, obtained the highest net results per head of sheep. The natural adaptability of the country for the production of high-class sheep and wool, which is beyond dispute, has, of course, been very largely responsible for the prominent position which Australia holds in the wool trade; but a word of praise is due to the flockmasters who have so ably bred their flocks, classified and marketed their wool in such an honest and expert manner that a lead has been

<sup>1</sup> Heavy decrease owing to drought.

given and acknowledged by the whole world. But the question is — Are we upholding the reputation which has been faithfully won?

Certainly the larger clips of Australia and New Zealand could hardly be placed upon the market in a better or more practical manner, but even in these there is a difficulty in maintaining old standards owing to the great trouble experienced in obtaining skilled labor. There is no denying the fact that the rapid disposal of estates and dispersal of stock have resulted in a big weight of comparatively small and indifferently prepared brands taking the place of once renowned clips.

#### Closer settlement results.

Closer settlement is undoubtedly a good thing for any country, but, unless great care is taken, the high reputation which Australia and New Zealand have so long enjoyed as the best woolgrowing countries in the world, and for the best classed and packed wool, will be seriously impaired. Though many of the smaller growers, and more particularly those who make woolgrowing their main object, take a commendable pride in the breeding, classing, and packing of their wool, others who have lately obtained farms either do not realize the importance of proper classing, or they do not know how to do the work; and as there are many thousands of comparatively small woolgrowers in the Commonwealth and Dominion who could hardly be expected to employ expert assistance, it behooves the Governments in the various States to do far more than is at present being done to give expert advice regarding sheepbreeding, woolclassing, etc.

# Woolshed facilities.

Australian pastoralists have shown by past results that most of them know just how best to prepare their clips for market, and at all times it is easy for them to obtain advice from the experts connected with the companies which handle their business; but there is danger ahead even as regards the larger clips. Firstly, it is almost impossible to obtain labor in any way skilled in the work, and further, if it were obtainable, rates of pay are so exorbitant, and much of the labor so unreliable, that one is more comfortable, if not indeed actually better off, without it.

# Less care manifested in preparing wool for market.

Not for very many years have we seen so many growers send their skirtings to market only partially picked, and this may in some measure account for the general complaint about pieces, etc., not yielding up to expectations. This is an unpleasant thing to have to admit, more especially when our greatest competitors in wool production, viz, the Argentine and South Africa, are improving their wool and methods of preparation each year; but already

the Australian and New Zealand clip is feeling the effect of the searcity of reliable labor. The position is all the more unfortunate because both in the Argentine and South Africa labor is much cheaper than it is in Australasia.

#### EXPORTS OF WOOL TOPS FROM AUSTRALIA.

The exports of wool tops from Sydney during the years 1909, 1910, 1911, 1912, and the first six months of 1913, from figures compiled by the Department of Customs, have been as follows:

TABLE XXV.

Destination.	Bales.	Lbs.	£.
1909 :			
Belgium	45	15,247	1,617
Japan	1,135	481,245	57,021
	1,180	496,492	58,638
1910:			
United Kingdom	430	182.012	22,159
Belgium	50	22,357	2,622
Japan	2,133	886,134	106,253
Italy	84	32,966	3,840
	2,697	1,123,469	134,874
1911:			
United Kingdom	115	55.481	6,213
India	9	4,655	493
Belgium	124	60,869	6,698
Germany	1,288	653,591	69,059
Italy	296	135,763	15.478
Japan	3,268	1,602,747	177,465
	5,100	2,513,106	275,406
1912:			
United Kingdom	150	74,850	8,128
Belgium	347	174,192	17.552
Japan	5,783	2,703,021	290,101
Italy	57	27,927	3,168
Germany	36	17,463	2,074
India	45	20,597	2,276
	6,418	3,018,050	323,299
913 (6 months):			
United Kingdom	90	39,771	3,769
India	45	19,852	2,437
New Zealand	3	1,566	168
Belgium	53	28,758	2,881
Japan	3,229	1,465,528	171,643
	3,420	1,555,475	180,898

The total exports for the four years and six months have thus been 18,715 bales, weighing 8,706,592 pounds, of a value of £973.115.

#### BONUS ON WOOL TOPS.

A protest was made during the past season by the Sydney wool scourers, fellmongers, basil-tanners, carcase butchers and meat exporters against the continuance of the bonus granted by the Federal Government on the export of locally manufactured wool tops. A pamphlet issued sought to prove that as the amount of bonus increased the value of wool exported decreased, and that the more cheaply the Australian bounty-fed tops were put on the Japanese and other markets the more cheaply the wool buyers who competed for the top trade sought to purchase Australian wool. It was contended that this recoil was inevitable, and that while the bonus benefited one or two companies, its effect was to lessen the value of wool in the Commonwealth.

The Federal Government, however, has stood to the local topmakers and turned down the objectors. The Minister for Customs stated that an inquiry has shown that the bounty on wool tops was "beneficial to the producer of wool tops and to the workers in the industry," and declared that it would be extended for a further two years at the expiration of the present bonds.

### SOUTH AMERICA.

Latest sheep figures for South America are as follows:

	Head.
Argentine	80,401,486
Uruguay	26,286,296
Chili	4,224,266
Falkland Islands	715,000
('olombia	746,000
Other States	409,000
m	
Total	-112.782.048

The above totals are about 15,000,000 head below highest numbers, but are in excess of those for the year 1895, whilst in Australia the reverse is the case. The past season's clip from the Argentine is said to have been of better quality and condition than the wool output of the preceding year.

On the average of years the weight of a bale of Argentine

On the average of years the weight of a bale of Argentine wool is about 910 pounds, for Uruguay the average is about 1,000 pounds. That there continues to be a good increase in the Argentine sheep figures, despite the heavy slaughtering, is shown by the latest statistics, which give the number as at the end of 1912 as 80,401,486, as against 77,303,517 in 1911, and 67,211,754 in the year 1908.

#### SOUTH AFRICA.

The great increase in production in South Africa is illustrated in the following table of figures, which sets out the production since 1900:

Year.	Bales.	Lbs.
900 (war time)	140,000	
902	234,000	
903	234,000	
904	201,000	
005	209,000	
06	238,000	
07	287,000	108,000,000
08	276,000	101,000,000
009	380,000	138,000,000
910	376,736	125,000,000
911	376,000	125,000,000
012	463,000	157,761,470

Details are given in the following table of the various breeds of sheep and the number and description of imported stock on May 7, 1911:

TABLE XXVI.

	Union.	Cape.	Natal.	Transvaal.	Orange Free State.
Woolled:					
Merinos	16,513,561	7,921,186	788,615	1,743,870	6,059,890
English	18,481	2,780	9,780	2,746	3,175
Unclassified	5,310,173	3,127,870	306,628	583,688	1,291,987
Persians	902,203	639,686	15,254	103,841	143,422
Africanders	5.419,128	4,368,199	63,512	248,434	738,983
Unclassified	2,493,113	1,074,792	335,469	732,671	350,181
Imported Stock:		, ,			- /
Rams	3,645	850	347	467	1.981
Ewes	15,617	1,573	633	2,448	10,963

Within recent years over 30,000 stud sheep have been secured in Australia by South African pastoralists and farmers, and they have made that clip what it is to-day—a good and increasing one of pure merino, which is competing so strongly with Australian wool that tops made solely out of pure South African merino have generally cost more per pound than tops combed from Australian wool. This has been due to the fine quality of fiber and heavy shrinkage in scouring. The South African wool is finer in quality than the Australian, but not so long or so bulky,

and it is said to produce a thin papery material unless blended with our more lofty wool. Still, robust sheep with wool of long and bulky staple are being imported so freely from Australia that this characteristic of thinness will disappear.

Since the transition of the Argentine flocks from merino to crossbred, which commenced nearly thirty years ago and gained impetus as time went on, Australia and Uruguay enjoyed until recently almost a monopoly in the production of merino wool, but the South Africans have made such rapid strides in sheep husbandry from the time of the Boer war that serious competition from that quarter threatens. Eleven years ago the production of wool in South Africa amounted to 140,000 bales, or 34,944,263 pounds, and most of it was short, heavy, and unattractive. It had established a bad reputation with manufacturers and realized low prices. The Cape's exports in 1912 were 463,000 bales, weighing 157,761,470 pounds.

## WOOL SHIPMENTS TO JAPAN.

The following figures give the shipments of wool from Sydney to Japan during the past twenty-three years:

Season.	Bales.	Season.	Bales,
1890–1	200	1903–4	6,550
1893-4	500	1904–5	10,727
1894–5	1,388	1905-6	4,931
1895–6	4,454	1906-7	22,174
1896–7	1,668	1907-8	7,954
1897–8	3,368	1908-9	8,363
1898-9	4,057	1909–10	18,674
1899–1900	4,262	1910–11	16,168
1900–1901	2,456	1911–12	20,002
1901-2	1,982	1912-13	15,979
1902-3	2.654		.,

TABLE XXVII.

It is satisfactory to note the steady increase in the demand during recent years, which, however, is more real in our markets than is apparent, for in addition to buying raw wool, Japan is the chief support of our wool-combing establishments, from whom large weights of tops are taken each year.

#### MANUFACTURING CONDITIONS IN JAPAN.

The question of importing more machinery into Japan to manufacture tops has lately been engaging attention. Some of the mills already have their plant, and the most interesting aspect of the near future will be to see how far top imports are supplanted by raw wool. So far as Australia is concerned any falling off of

top imports will be made up in increased purchases of raw wool, so that woolgrowers have nothing to lose, but, on the other hand, a good deal to gain. Our top-making industry may sooner or later be affected, but possibly there will be a fair demand for tops for a long time to come.

In this connection there is a clause in the new Japanese tariff

that is of interest. It states that:

"In respect of articles on which an export duty is granted in foreign countries a Customs duty of the same amount as the said bounty may be imposed by Imperial ordinance in addition to the duty prescribed in the tariff."

This would mean if brought into force that local topmakers would lose the advantage they now enjoy through the bonus, and the position of the Japanese topmaker would be improved, whilst Bradford topmakers would be in a better position through not having to compete with Australian bounty-fed tops.

# THE WORLD'S SHEEP, AND WOOL PRODUCT.

Table XXVIII. contains the most recent statistics available of the number of sheep in the world. In some countries goats are included and some report lambs with the sheep, while others do not. In some countries no statistics exist, so that the table is neither so complete nor so exact as might be desired, but it is useful for comparison with preceding reports and naturally becomes more nearly correct each year as fuller and more accurate statements are obtainable.

The figures for the United States are those of the Department of Agriculture as of January 1, 1913, and are based upon the estimates of its correspondents of the gains or losses during the year. They show a loss of 1,270,887 in the number as compared with the previous year.

TABLE XXVIII. — NUMBER OF SHEEP IN THE WORLD ACCORDING TO THE
MOST RECENT AVAILABLE STATISTICS AND ESTIMATES.

Country.	Number of Sheep.
North America: United States: Continental	
Total	
Total United States	51,565,28

TABLE XXVIII. - Continued.

Country.	Number of Sheep.
North America: continued.	
Canada	2,389,300
Newfoundland	78,055
Mexico	3,424,430
Central America	124,044
Cuba	9,989
British West Indies	27,980
Dutch " "	22,643
Daten	11,73
Guadeloupe	
	6,088,169
Total North America	57,653,443
South America:	4
Argentina	80,401,486
Brazil	
Chile	4,224,260
Uruguay	26,286,296
Falkland Islands	715,000
Colombia	746,000
Other South America.	409,000
Total South America	112,782,048
Austria	
Total	12,095,494
Belgium	235,722
Bulgaria	8,130,997
Denmark, Iceland, and Faroe Islands	1,319,197
Finland	904,447
France	16,000,000
Germany	5,787,848
Greece	4,568,158
ltaly	11,162,708
Montenegro	400,000
Netherlands	889,036
Norway	1,393,488
Portugal	3,072,998
	5,655.444
Roumania	139,200,000
Russia in Europe	
Saxony	58,185
Servia	3,160,166
Spain	15,117.105
Sweden	1.010,217
Switzerland	159,727
Turkey	$^26,912,568$
United Kingdom, including Isle of Man, etc	27,629,206
All other Europe	26,120
Total Europe	164,888,831

<sup>&</sup>lt;sup>1</sup> Includes goats. <sup>2</sup> Not including vilayets of Scutari and Constantinople.

TABLE XXVIII. - Concluded.

Country.	Number of Sheep.
ASIA:	
British India:	
British Provinces	
Native States	
Total	26,558,912
Cevlon	96.335
Cyprus	1 294,456
Japan	3,411
Philippine Islands	88,760
Russia in Asia	38,017,000
Turkey in Asia	45,000,000
Total Asia	<sup>2</sup> 110,058,874
Africa:	
Algeria	9,066,916
British East Africa	6,000,000
German East Africa	1,560,000
German South West Africa	300,722
Madagascar	333,454
Rhodesia	250.182
Soudan (Anglo-Egyptian)	952,950
Tunis	615,584
Uganda Protectorate	471.297
Cape of Good Hope	
	17.136,936
Natal.	1,520,238
Orange Free State	8,600.582
Transvaal	3,418,163
All other Africa	1,130,333
Total Africa	51.357,381
Oceania:	
Australia	83,451,867
New Zealand	23,750,153
Total Australasia	107,202,020
Other Oceania	15,120
Total Oceania	107,217,140
Total World	603,957,717

Report of Consul J. H. Snodgrass Jan. 6, 1913.
No data are available for China.

The total number as given in this report last year was 626,872,186, the total this year being 603,957,717 shows a reduction in number of 22,914,469. The loss occurring principally in Europe and Australia.

# Table XXIX. — Wool Production of the World.

# From the Latest Official Returns and Estimates.

Country.	Wool.
North America:	Pounds.
United States	296,175,300
British Provinces	11,210,000
Mexico	7,000,000
Central America and West Indies	1,000,000
Total North America	315,285,300
South America:	
Argentina	325,619,420
Brazil	1,130,000
Chile	27,745,080
Peru	9,940,000
Falkland Islands	4,324,000
Uruguay	156,967,520
All other South America reported	5,000,000
Total South America	530,726,020
Zuwana	
Enrope: United Kingdom	132,754.430
Austria-Hungary	41,600,000
France	78,000,000
Germany	25,600,000
Spain	52,000,000
Portugal	10,000,000
Greece	14,000,000
Italy	21,500,000
Russia (Europe)	320,000,000
Turkey and Balkan States	90,500,000
All other Europe	18,000,000
Total Europe	803,954,430
Asia : British India.	60,000,000
	50,000,000
	60,000,000
Russia (Asiatic)	90,000,000
Persia	12,146,000
All other Asia reported	1,000,000
Total Asja.	273,146,000
Africa:	
Algeria	33,184,000
British Africa	157,761,470
Tunis	3,735,000
All other Africa reported	13,000,000
Total Africa	207,680,470
Oceania:	
Australia (exports)	551,977,702
New Zealand	169,843,814
Australasia	721,821,516
Consumed in Australasian manufactures	28,175,775
All other Oceania reported	100,000
Total Oceania	750,097,291
Total occument	

Table XXIX. presents a statement of the world's wool production, compiled from the latest available official reports and estimates. from which it appears that the total accounted for is 2,880,000,000 pounds. Of this the United States furnished one-tenth, Argentina one-ninth, Uruguay one-twelfth, while Australia furnished as much as the three combined, 750,000,000 pounds, or over one-quarter of the world's production. These countries with South Africa, which increased her production to 158,000,000 pounds, supply nearly all the merino and English blood wools. Most of the wools from Asia, some from Europe, and many from South America, are of a coarse low grade, used generally for making carpets, common blankets and similar goods.

The total production as reported is about 90,000,000 pounds less than last year's figures. The falling off appears in round numbers as follows:

United States	6,000,000 pounds.
Argentina	42,000,000 "
United Kingdom	10,000,000 ''
Australia	82,000,000 "
	140,000,000 pounds.

while Uruguay and British Africa respectively show increases of 18,000,000 and 32,000,000 pounds.

The table at the close of this Bulletin contains the official statement, subject to revision, of the imports of wool and wool manufactures entered for consumption for the fiscal years ending June 30, 1912 and 1913. It is the one generally most acceptable for statistical purposes, for it shows the actual quantities and values of foreign goods that go into distribution yearly through the merchants of the country.

WM. J. BATTISON.

# THE TARIFFS OF 1846 AND 1857.

A STUDY OF THE RESULTS OF THE REVENUE-ONLY LEGISLATION BEFORE THE CIVIL WAR.

By WINTHROP L. MARVIN.

THROUGHOUT the debate in Congress upon the new Sim mons-Underwood tariff law, speaker after speaker on the Southern Democratic side eulogized the Walker tariff of 1846, and its successor of 1857, as wonderful examples of economic legislation, and as the "best tariffs" ever enacted in the United States.

At any time from 1857 to 1876, when public men who helped to fight and to repeal that legislation were numerous in Congress, such an assertion would have been received with ironical surprise or open ridicule. But that generation has departed and another has appeared upon the scene, and a proposition that would have been rash then is now advanced with some show of confidence that it may convince because the facts of actual experience are dim or forgotten.

The tariff of 1846 was framed and passed by Southern men under the lead of Robert J. Walker, of Mississippi, Secretary of the Treasury. Southern interests were then almost wholly agricultural. Cotton was king. The political contest over slavery in Congress had gravely antagonized North and South, and there was in all the cotton States a sharp jealousy of the progress of Northern manufactures, steadily enhancing Northern wealth and population. The relations between the slavery question and the tariff question were very close. Originally most of the really great public men of the Southern States were frank protectionists. Washington, Jefferson and Madison had heartily approved and joined in the enactment of the first tariff act of the first Federal Congress, one of whose objects its authors declared to be "the encouragement and protection of manufactures." Jackson after them was an outspoken protectionist. But the growth of the slavery feud between the sections brought about a significant change in the Southern Democratic attitude, clearly reflected in John C. Calhoun, the great Southern Democratic leader. Calhoun first championed the protective tariff policy, as the fathers of his party had done before him. But the wonderful expansion of cotton growing after the Whitney gin was invented moved the South more and more to stake its all on this one great staple, the chief market for which was in the crowding mill towns of England. The Southern cotton planters wished to exchange their valuable fiber for cheap English manufactured goods, to which the American protective tariff interposed an obstacle. The English cotton manufacture had been built up by the most rigorous kind of protection, but the English mill owners then as now hated the thought of protectionism in America. Moreover, New England, New York, and Pennsylvania, which the protective tariff seemed especially to benefit in the impetus given to native manufacturing, were the particular hotbeds of the anti-slavery propaganda, which was offending Southern sensibilities. Hence the quick and complete about-face on the tariff issue of Calhoun and his Southern Democratic colleagues.

#### FREE TRADE AND SLAVERY.

These gentlemen were entirely frank about it. They advocated free trade because it would injure the North. As between Old England and "abolitionist" New England, they desired that Old England should be prosperous. This purpose is openly and even defiantly proclaimed in a typical Southern Democratic work of the period, "Cotton Is King," published by E. W. Elliott, LL.D., at Atlanta, Ga., in 1860. Dr. Elliott said:

If they (the Southern cotton planters and the Southern Democratic leaders) could establish free trade, it would insure the American market to foreign (that is, English) manufacturers; secure the foreign market for their leading staple; repress home manufactures; force a large number of the Northern men into agriculture; multiply the growth and diminish the price of provisions; feed and clothe their slaves at lower rates; produce their cotton for a third or

fourth of former prices; rival all other countries in its cultivation; monopolize the trade in the article through the whole of Europe.

The cynical selfishness of the Southern Democratic leaders of the second generation, who in 1846 and afterward sought free trade or its synonym, tariff for revenue only, in order to punish and impoverish the manufacturing North and enrich the South, could not well be more vividly expressed. Southern public men bitterly resented the fact that under the protective tariff policy the free skilled labor of the Northern States had seen its wages steadily advanced, while the slave labor of the Southern States and the whole organization of society there were adapted only to agriculture and wholly unfit for manufacturing. As one of the most redoubtable of the free trade leaders, Hon. George McDuffie, of South Carolina, said in the National House:

I will now tell the gentleman from Massachusetts, if he will pardon the liberty, what is the natural price of the manufacturing labor of the Northern States estimated in money. It is precisely the same as the manufacturing labor of England and not a cent more. (Congressional Debates, Volume VIII., page 3827.)

Another typical Southern spokesman, Mr. Lewis, of Alabama, said:

But for the operation of the tariff laws in enhancing the price of Northern labor, the state of things would have been completely the reverse of what it now is, and a day's labor in the cottonfield would have commanded two days of the Northern manufacturing labor.

## THE BENEFICENT TARIFF OF 1842.

These citations from representative Southern men, showing their hatred of the protective policy and the motives of that hatred, are necessary to an understanding of the real character and purpose of the Walker tariff of 1846. The so-called compromise tariff law of 1833, enacted to conciliate the

extreme Southern slaveholding sentiment, had plunged the country into acute distress, and had been superseded by the protective tariff of 1842, a result of the Whig triumph of 1840 and the election of "Tippecanoe" Harrison as President. Under that protective tariff, the enactment of which was stubbornly opposed by Calhoun and his lieutenants, the industries of the North had regained their strength and the whole country had prospered. President Tyler was enabled, in his annual message of December, 1844, to Congress, to congratulate the nation upon its full recovery from the disastrous anti-protectionist experiment of 1833 which the protective tariff of 1842 had brought, saying:

Commerce and manufactures, which have suffered in common with every other interest, have once more revived, and the whole country exhibits an aspect of prosperity and happiness.

A commercial authority of that time (the "New York Express" of April, 1845) drew this picture of the condition of the nation under the law of 1842:

The manufacturing interest of this country, at the present time, is extending itself faster than at any period since we have begun to manufacture for ourselves. From Maine to the extreme West and Southwest, every spindle and loom is at work — many of the mills with orders for their works for months ahead. Water is no longer the sole motive power of factories, and, in the most favored localities at the East, for manufactories, this power has long been exhausted, and the never-failing power of steam has been resorted to. Newburyport and Boston factories of this class are now in course of erection, and even Lowell has now more factories building which are to be propelled by steam than by water. At no time have there been more new mills building, or the old ones more active than at the present; four new mills, of the largest size, are to be erected this summer, and large additions made to the old ones, —in all, not less than 25,000 looms. At the new "City of Looms," on the Merrimack, at Haverhill, active preparations are making to commence their dam, which, when completed, will furnish a waterpower that will not be exhausted in half a century of prosperous manufacturing. In New Hampshire and Maine there is the same tendency to invest capital in manufacturing; cotton mills are the favored stocks, but other articles are not forgotten or neglected. In Maine charters have been granted for thirteen cotton and woolen mills, and two iron factories; the old companies have also added largely to their capital stocks; and at no time has Maine been so decidedly in favor of manufacturing as at present. At Buffalo there has been a large mill started, with every prospect of success. At St. Louis and numerous other points in the West, in Mississippi and Georgia new mills are erecting. At Baltimore and Georgetown several flour mills have been altered to cotton mills; and all through the country there is seen a general wish to make investments in this way.

This is American testimony; there is equally conclusive proof of the results of the law of 1842 from the other side of the Atlantic. The "London Times," in an article on "The Decline of Trade with America," published on July 19, 1843, the year following the passage of the protective legislation, lamented the heavy loss in exports of cotton, woolen and silk goods and of iron, all of which the Americans were now manufacturing for themselves, and added that "the balance of trade is turning against this country in a manner which renders it doubtful whether we shall not shortly have to pay for American cotton in specie instead of goods. Nothing but a very great revival of the demand for English manufactures can save us from this evil; and without a reform of the American tariff, there is very little hope of any revival at all equal to the necessities of the case."

# HOW THE TARIFF OF 1846 CAME IN.

These were the conditions in America and in England when the tariff of 1842, for revenue and protection, framed and enacted by Northern statesmen, was supplanted by the tariff of 1846, for revenue only, framed and enacted chiefly by Southern statesmen, who hated protection because the free skilled labor of the North was in a superior position to utilize its benefits. The Southern Democracy had carried the Presidential election of 1844, and controlled both

Houses of Congress. The political contest had been a hardfought battle, for the good results of the tariff of 1842 were known of all men, and a very great majority of the American people were protectionists. President James K. Polk was elected over Henry Clay by a plurality of only 38,185 votes in a total of 2,698,611. Mr. Polk, who was a citizen of Tennessee, had been opposed to protection throughout his public life, but in the crisis of the campaign of 1844 he issued an equivocal letter which might be interpreted as signifying that he was a convert to protectionism and, in fact, was so interpreted in New England, Pennsylvania and other industrial communities. It was believed at this time that but for that letter Mr. Polk and his party would have been decisively beaten. His Vice-president, George M. Dallas, of Pennsylvania, had always been regarded a firm protectionist.

But when the new Administration took its seat it was quickly found that it was the slaveholding, tariff-hating South that was in the saddle. Robert J. Walker, of Mississippi, a foe of all protection, was made the Secretary of the Treasury, and President Polk, who had been given his election by people who believed him to be a protectionist, came out in his inaugural address of March 4, 1845, virtually in favor of free trade. Secretary Walker on December 3, 1845, issued his celebrated report to Congress — an elaborate summing up of the traditional Southern Democratic arguments against the protective system. A tariff bill embodying Secretary Walker's views was presented on June 15, 1846, to the House of Representatives, and was passed on June 30, and sent over to the Senate. It happened that the Senate was very evenly divided. One critical vote on the bill in the Senate was a tie, 27 to 27, and Vice-president Dallas, very much to his embarrassment, was compelled to give the deciding voice. Repudiating his obligations to his people and his convictions of a lifetime, he voted under the relentless Southern pressure for the bill, which was signed by President Polk on June 30 and became effective December 1, 1846.

This tariff for revenue only of 1846 was made possible in the first place by the bold deception practised on the people of the North in representing Mr. Polk as a protectionist. It was imposed by the triumphant South upon the North, against the protests of twenty-eight Northern Democratic members, who voted against it in the House of Representatives. As to the defection of Vice-president Dallas, which made it possible to pass the bill through the Senate, a leading Pennsylvania Democratic journal, the "Sentinel," of Philadelphia, said:

There was one burst of indignation that Pennsylvania had been grossly deceived, and that her best interest had been prostrated, too, by the vote of George Miflin Dallas, one of her own sons, whom she has fostered and cherished for years, and who, she had a right to expect, would stand by her in the hour of trial. Mr. Dallas has thrown the weight of his influence into the Southern scale against his native State. We are sorry that we have to record this deed of deep ingratitude to the old Keystone State. If Mr. Dallas had, by the remotest hint, given the people of Pennsylvania, in the campaign of 1844, to believe that he would go with the South and for a Southern tariff, he would not have been elected Vice-president.

#### A FAVORING CHAIN OF EVENTS.

This ill-starred tariff measure was most unfortunate in the circumstances of its enactment, but for a few years it was singularly lucky afterward. A succession of fortuitous events deferred the inevitable consequences of the excessive reductions of the rates of duty which the Southern authors of the new law had enforced. Congress on May 13, 1846, declared war against Mexico. Within two years this war led to the disbursement of \$150,000,000, for military service or military supplies, among the people of the country, particularly in the South and Southwest. This gave a marked temporary impetus to domestic trade, and the number of men withdrawn from their daily vocations for enlistment in the war was not large enough to have any serious effect on any domestic industry. There followed in 1847 the famine in

Ireland and the failure of crops in other European countries, creating a sudden abnormal demand for the production of American agriculture, the exports of which rose to \$68,450,000 in 1847, as compared with \$27,581,000 in 1846. Then in 1848 there occurred widespread political revolutions in Continental Europe, embarrassing native trade and industry and creating a further need of American foodstuffs.

But, most important of all, gold was discovered, in May, 1848, in California, and the rush of the Argonauts began. Up to that time our native production of the precious metals had been insignificant. Specie had been imported when needed, and was difficult to procure. But in 1849 the Western mines yielded \$40,000,000 of gold, which rose to \$60,000,000 the next year and to \$65,000,000 in 1853. Not until 1860 did the new gold country produce less than \$50,000,000, and from 1847 to 1860, both inclusive, the total amount of gold received from the mines of the United States was \$651,-889,085. (Report of the Director of the United States Mint.)

This in truth should have been the golden age of American trade and industry. Such for a brief period it actually seemed to be. For following the gold discoveries came the Crimean War of 1854–1856, which for the time being excluded Russian wheat from the European market, and made a new demand upon the broad fields of America. As President William McKinley has said of this era:

Never was there a period in our history in which the free trade policy had so excellent an opportunity to demonstrate its usefulness and adequacy to our industrial and governmental conditions.

## WILLIAM MCKINLEY'S DESCRIPTION.

No economic experiment could have had a fairer chance. But what was the actual outcome? It was this—as President McKinley has concisely described it:

But instead of insuring prosperity, it produced universal distress and want; instead of raising money to support the government, even during a period of peace and wonderful

development, the system of duties it provided was utterly insufficient and produced results exactly the opposite of those claimed for it. As soon as the foreign wars ceased, the revenue began to diminish and the expenditures to exceed it, thus creating deficiencies and forcing loans and increasing our national debt from \$15,500,000 in 1846 to \$90,580,000 on March 4, 1861.

Distress came under the Walker tariff of 1846, but fortunately not everywhere at once, because of the offsetting forces already outlined. The conquest of new territory from Mexico and the California gold fields drew emigration to the far West and Southwest. There were fewer than 5,000 miles of railroads in the United States in 1846, but between 1850 and 1860 more than 20,000 miles additional had been constructed to meet the needs of domestic commerce. The first telegraph line appeared between Washington and Baltimore The inventive genius of mankind was awake all over the world, and with the hungry multitudes of Europe demanding to be fed from the newly opened farms of the American West, there should naturally have been a decade of sustained industrial development and prosperity in America. There was prosperity in some trades and some places. Protectionist champions, like Blaine and Allison and Garfield, have often been quoted as declaring that "times were good" under the tariff of 1846 and its lineal successor, the tariff of 1857. So times were good, locally, for a few years, here and Even an ill-considered, hostile fiscal law cannot wholly and at once impoverish America.

But taking the broader view, it is not difficult to understand why the tariff-for-revenue-only experiment that lasted so long and ended so disastrously was cut off in favor of another protective tariff as soon as the slaveholding South lost its grip and the industrial North gained firm control of the government in Washington. Never at any time was the Southern policy of nonprotection or free trade acquiesced in by Americans, North or South, who remained protectionists. The Democratic platform of 1848 felicitated the country on "the noble impulse given to the cause of free trade by the

repeal of the tariff of 1842, and the creation of the more equal, honest and productive tariff of 1846." In similar vein the "London Times" had thus exulted:

Henceforth the principle of duties for protection must be considered as abandoned in the United States. The duties which remain insufficient to compensate the objects of protection are quite high enough to insure a revenue to the State. The alteration in the American tariff can be regarded as a great triumph gained by the principles of free trade.

### CONDEMNED BY PRESIDENTS TAYLOR AND FILLMORE.

But this Southern Democratic view and this characteristic English view of the tariff of 1846 were not concurred in by the men who carried the national election of 1848. dent Zachary Taylor, the popular hero of the Mexican War, and Vice-president Millard Fillmore, who in a few months succeeded him, were both outspoken protectionists. Both formally and earnestly protested against the tariff-for-revenueonly experiment. President Taylor in his message to Congress urged "a revision of the existing tariff and its adjustment on a basis which may augment the revenue." He asked for a system "which may place home labor, at last, on a sure and permanent footing," and provide "due encouragement of manufactures." President Fillmore in his message to Congress on December 2, 1851, showed that the vaunted increase in the export of agricultural products was due almost wholly to the high price of cotton, and argued that as a benefit "to the farming population of this country" the tariff of 1846 was a failure. In a later message President Fillmore said:

Without repeating the arguments contained in my former message in favor of discriminating protective duties, I deem it my duty to call your attention to one or two other considerations affecting this subject. The first is the effect of large importations of foreign goods upon our currency. Most of the gold of California, as fast as it is coined, finds its way directly to Europe in payment for goods purchased. In the second place, as our manufacturing establishments are broken down by competition with foreigners, the capital invested in them is lost, thousands of honest and industrious citizens are

thrown out of employment; and the farmer, to that extent, is deprived of a home market for the sale of his surplus produce. In the third place, the destruction of our manufactures leaves the foreigner without competition in our market, and he consequently raises the price of the article sent here for sale, as is now seen in the increased cost of iron imported from England.

## WEBSTER AND THE TARIFF.

These words of the American Executive are worth recalling because it has often been asserted by advocates of free trade — and never more volubly than in the Congressional debate preceding the passage of the Simmons-Underwood tariff of 1913 — that the Walker tariff of 1846 brought such high prosperity to the United States that even the official champions of the protective policy were silenced. This is wholly contrary to the truth. Daniel Webster, Senator from Massachusetts, who had led the Northern opposition in the Senate to the tariff of 1846, never ceased to condemn that legislation and the policy embodied in it, so long as he lived. Webster delivered one of the most eloquent and masterly of his speeches against the tariff of 1846. spoke for three days, on July 25, 27, and 28, practically closing the debate on the protectionist side. He took up in turn, examined and destroyed every one of the Southern Democratic tariff contentions, with the same patriotism, scholarship and logic with which he had refuted their arguments on the sovereignty of the States. He said of the tariff of 1846, in words long quoted and remembered:

It is not a bill to add to the comfort of those in middle life, or of the poor. It is not a bill for employment. It is a bill for the relief of the highest and most luxurious classes of the country, and a bill imposing onerous duties on the great industrious masses, and for taking away the means of living from labor everywhere throughout the land. The interest of every laboring community requires diversity of occupations, pursuits, and objects of industry. The more that diversity is multiplied or extended the better. To diversify employment is to increase employment and to enhance wages. And, sir, take this great truth; place it on

the title page of every book of political economy intended for the use of the government; put it in every farmer's almanac; let it be the heading of the column in every mechanic's magazine; proclaim it everywhere, and make it a proverb, that where there is work for the hands of men there will be work for the teeth. Where there is employment there will be bread. It is a great blessing to the poor to have cheap food, but greater than that, prior to that, and of still greater value, is the blessing of being able to buy food by honest and respectable employment.

#### THE SOUTH SUPREME.

The protectionists of the North and the country never "accepted" the tariff of 1846 or its successor of 1857. On the contrary, they never ceased to fight that kind of sinister legislation. They could not repeal it under Taylor and Fillmore because they did not control the action of Congress. There the South was dominant—and the South with its slave labor demanded free trade as instinctively as the North with its free labor sought protection. The political conditions of that stormy and memorable era in our national life are well set forth by a competent economist and historian:

The fact that members of the Democratic party of the North voted for these measures, when the political conditions of the times are taken into consideration, affords no evidence of benefits or satisfactory business results arising from this legislation. The South shaped and directed the policy of the Democratic party, made its platforms and dictated the legislation of the country, not only on the slavery question, but upon every other question. They also controlled the patronage, dealt out all offices, and members from the North were compelled to bow to Southern dictation and abide by party caucuses or become ostracized, stripped of political influence and humiliated. The social as well as the political influence of the Capitol was exacting and unrelenting in its enforcement of every principle championed by the South. (George B. Curtiss, in "The Industrial Development of Nations," Volume II., page 481.)

What has already been said is sufficient to show the manner in and the influences by which the Walker tariff for revenue only of 1846 came to be enacted. It was passed by the Southern Democracy in Congress frankly as a long step toward entire free trade, the final goal of Southern legislation. The belief that a protective system was favorable to the North with its free skilled labor and unfavorable to the agricultural South with its slave labor was responsible for the sharp change of the Democracy from protectionism under Jefferson, Madison, and Jackson to free trade or tariff for revenue only under Polk, Walker, and Calhoun. The tariff of 1846 was created by and for the South, with what help it could secure from some Northern States because of the intense partisanship of the period, against the protests of the chief industrial Northern States, and the earnest opposition of a considerable group of Northern Democratic Representa-Moreover, without the grave deception involved in that campaign letter of President Polk, the country could not have been carried by the Democracy in 1844 and the tariff of 1846 could not have been enacted.

Above all things the great historic fact must be remembered that "Cotton was King" then, and that save for the one powerless Whig Administration of 1849–1853 the South was until 1860 in full actual control of the Federal government in Washington. This is the reason why the tariff of 1846 remained in force so long, and was succeeded in 1857 by a similar measure.

## ACTUAL RESULTS OF THE TARIFF OF 1846.

With this summary of the political history of this tarifffor-revenue-only legislation, let us proceed to a consideration
of its practical results. For reasons already stated, these
results were not everywhere and always disastrous, but a
candid survey of the whole range of trade and industry can
lead to no other conviction than that abandonment of the
protective policy of the founders of the republic — wellcalled by Henry Clay and his friends "the American system"
— proved in the end most unfortunate for all of the people
of the United States.

Secretary Walker had presented his bill in 1846 very

frankly as a measure for the particular benefit of the agricultural interests. He disclaimed any intentional hostility to manufacturing, but it is impossible to read his report, or the speeches of the representative Southern Democratic leaders of the time, without a recognition that they were hostile, and enemies of the great expansion of the industrial arts conducted with their free labor in the Northern Commonwealths. Again and again, as in the speeches of McDuffie and Lewis already quoted, this spirit found frank if imprudent expression. Thus, as a typical Southern Democrat, Representative Towns, of Georgia, said:

Let any man in the South engaged in planting estimate the amount of his income from his laborers, including men, women and children, and they will see that they do not average one-third of the amount deposited in the savings banks by the laborers of Massachusetts! Will they not inquire into the cause of this vast difference in the value of labor in the South and East? And if they should find that it results from the influence of the protective system which they are as certain to discover as that they make the examination, is it to be believed that they are to remain silent and inactive, year after year, under a state of wrongs paralyzing their energies and absorbing their sustenance? (Appendix, Congressional Globe, page 833, Twenty-ninth Congress, first session.)

One great motive, then, of the tariff of 1846 was to make agriculture more prosperous. Secretary Walker's persistent argument was that if we opened our ports more freely to European manufacturers, Europe would purchase more freely not only of the cotton of the Sonth but of the foodstuffs of the West. Let us see whether this contention was fulfilled. In certain years of war and famine, Europe did buy more freely of our foodstuffs, but war and famine were then the manifest causes and would have been the causes if the protective system had continued in America. In those years when war and famine did not prevail abroad, the demand for our foodstuffs under the supposedly favorable tariff of 1846 was small and disappointing. Our manu-

facturers were injured, but our farmers were not helped. Professor Francis Bowen, of Harvard University, one of the foremost economists of his time, said in 1855 in his "Principles of Political Economy":

In 1850 and 1851 the average price of flour in our Atlantic seaports was about five dollars a barrel, a price at which the farmers of the West cannot afford to export it at all, except for the purpose of relieving a glutted market by a sacrifice. Meanwhile, the sale of British manufactures in this country, to the great depression of our domestic industry, rapidly increased. Our imports of the manufactures of wool, cotton and iron, for the year ending in June, 1851, had become 43 per cent, and for that ending in June, 1853, 125 per cent greater than they were the year before the alteration of the tariff. To pay for these extravagant importations we were obliged to sell our agricultural products at the reduced price just mentioned, and to export an immense amount of California gold besides. . . This is not all. Within three years after this reduction of the tariff, the price of the imported iron began to rise rapidly, and in 1852 and 1853 it was even higher than it had been before the ruin of the home manufacture. . . . The aggregate cost of iron to American consumers, during the eight years preceding 1854, was undoubtedly greater than if the reduction of the duties through the tariff of 1846 had never taken place.

#### THE PROSTRATE IRON INDUSTRY.

Thus, in normal years, the results of the tariff of 1846 to the farmers of the country were disappointing, and to the manufacturer almost ruinous. Professor Bowen alludes to the effect upon the iron industry, not then in 1846 the giant which it has since become. Under the protective tariff of 1842 the iron industry had thriven. The production of pig iron, a fair measure of the activity of the iron business, had increased rapidly, and was estimated by the Secretary of the Treasury in 1846 at 800,000 tons, "having quadrupled in four years." But in 1850 the production of pig iron in America, under the reduced and ad valorem duties of the Walker tariff, had fallen off to 564,000 tons. Though the population was multiplying and lines of railroads were being

built, the pig iron production of 1850 was not again attained until 1860, the year before the Civil War. Under the inadequate duties, the needs of America were supplied by enormous imports of iron from English manufacturers. Hon. Abram S. Hewitt, one of the foremost of American iron-masters and later a member of Congress and Mayor of New York, said in a speech at Trenton, N.J., in 1848:

I have lately been in New England, for the purpose of securing the contract for rails in order to keep the mills running after our present contract runs out. I offered to make the rails at the very lowest price at which they could be made at the present rate of wages. An English agent came over and underbid me and got the contract. Thus, for the want of a protective system, is the money sent to England to employ English workmen that ought to have come here to employ you.

Twenty-four Pennsylvania iron concerns failed in 1847, thirty-seven in 1848, forty-one in 1849, and twenty-two in 1850. Peter Cooper, the famous philanthropist, and the partner of Mr. Hewitt in the iron business, said of the effect of the tariff-for-revenue-only policy:

British iron and cloth came in and gold went out, and with each successive day the dependence of our farmers on foreign markets became more complete. With 1857 came the culmination of the system, merchants and manufacturers being ruined, banks being compelled to suspend payment and the treasury being reduced to a condition of bankruptcy nearly approaching that which had existed at the close of the free trade periods of 1817 and 1839.

The iron trade was then distinctively a Northern industry; it was severely punished. Iron was in 1850 coming into use as a material for ships. Alert American shipbuilders were eager to adopt it. American iron as a rule was superior to English iron for the purposes of ship construction, and many of the best iron steamers the ocean ever floated were launched between 1850 and 1860 at Boston, New York, and Philadelphia. But the Southern experiment in tariff for revenue

only struck down this American industry with all the rest. The California gold discovery had given a vast impetus to shipbuilding, but soon after 1855 all this impetus was spent. In that year 583,000 tons of shipping were built in the United States, and in 1859 only 156,000 tons—the quickest and most disastrous decline in the history of the industry. Just as the free trade experiment had failed to prove of any lasting benefit to agriculture, so it failed in the end to be of advantage to that branch of our foreign commerce represented in the American share of overseas carrying. In 1846 no less than 81.7 per cent of American imports and exports was carried in American vessels. In 1860 the American proportion had shrunk to 66.5 per cent. Everywhere the Walker tariff period closed in gloom and disaster.

### RESULTS IN THE COTTON MILLS.

Cotton manufacturing, in which the great Southern staple was involved, was treated with more consideration than was iron, in the tariff of 1846. This industry was relatively fortunate in its experience under the Walker law. Nevertheless, a conspicuous New England manufacturer, Nathan Appleton, declared, as quoted on page 778 of Report No. 342, of the Thirty-fourth Congress, first session, that "The depreciation of property in our cotton mills since 1846 is fully 25 per cent," and that the building of mills "has come to a complete standstill." Imports of cotton goods from England increased from 24,196,724 yards in 1846 to 85,944,261 vards in 1847 and were 56,569,633 yards in 1848. American manufacturers who were beginning to compete with England in the production of the finer cotton goods were forced to abandon this effort, and to content themselves with producing the coarser and cheaper fabrics, in which the material was the chief and the labor a subordinate factor. A New England authority, quoted in Hunt's Merchants' Magazine, Volume XXIII., page 679, in 1850, said:

The manufacturers of these goods, which comprise by far the greatest part of the cotton manufacture of this country, are in great doubt as to the results of the present state of trade in those fabrics, and they may well indulge in some serious thoughts as to the future, when they find themselves running their mills at an absolute loss. It is well known that there have been no profits realized from these goods for the last twenty months.

## THE WOOLEN INDUSTRY "PRACTICALLY RUINED."

As to the woolen manufacture, in which the Southern Democracy felt that it had no particular interest, its fate was unfortunate indeed. Edward Stanwood well sums up the situation in "American Tariff Controversies in the Nineteenth Century," Volume II., page 92: "It is not too much to say that the new tariff practically ruined the woolen industry, which had revived and become fairly flourishing under the protection it received under the act of 1842."

Woolen goods were dutiable at 40 per cent under the protective tariff of 1842. Raw wool valued at less than 7 cents a pound bore a 5 per cent duty, and wools valued at above 7 cents a pound, a duty of 3 cents a pound and 30 per cent ad American ingenuity shortly before had produced the Crompton power loom — "not a yard of fancy woolens had been woven by a power loom in any country until it was done by Mr. Crompton at the Middlesex Mills in 1840." The power loom invented by E. B. Bigelow for the weaving of carpets came into use at Lowell in 1843, and was greatly improved a few years later. Such machinery thus enabled American manufacturers to compete with and displace the product of the hand looms of Europe. The favorable tariff of 1842 gave American woolen mills an opportunity of which they took prompt and vigorous advantage. Says S. N. D. North in "A Century of American Wool Manufacture," page 44:

The cloths manufactured continued to be confined to satinets, jeans, cassimeres, doeskins, beavers, flannels and blankets. Near the close of the decade, Scotch plaids, in many beautiful colorings, were manufactured, and shawls were successfully made in considerable abundance. It has been stated that in 1843 the Middlesex Company made the first three-

quarter fancy trouserings, which sold readily at \$2 per yard; and it was during this decade that Edward Harris introduced his famous double and twist cassimeres. American shawls and blankets from the Bay State Mills were awarded prizes at the International Exhibition of 1851. There were also many mills making tweeds, and the fancy cassimere was already in vogue. The decade was notable also as witnessing the first attempt at the manufacture of worsted stuffs in this country.

This was the progressive and flourishing condition of the industry when the Walker tariff of 1846 came in. The Southern authors of that measure reduced the 40 per cent duty on woolen goods in the law of 1842 to 30 per cent on woolen fabrics in general; to 25 per cent on flannels and worsteds, and to 20 per cent on blankets. Then, in order the more surely to cripple this obnoxious Northern industry, the duty on all wools, the raw material of the manufacture, was left at the relatively high rate of 30 per cent ad valorem—as high as the maximum rate on woolen goods, and actually higher than the duty on finished worsteds, flannels or blankets. The instant result of this malevolent contrivance is thus described in the report of the United States Revenue Commission of 1866:

Under the tariff of 1842 no less than 1,800 looms were in operation in the manufacture of broadcloths. Under the tariff of 1846, which put the same or a higher duty on wool as on woolen goods, the manufacturers found it in vain to struggle against foreign rivals. The higher branches of the manufacture were abandoned: soon every one of the 1,800 broadcloth looms in the country ceased work. The only branches of the manufacture which continued with activity were those like flannels, which were supplied by the common wool of the country, so superior in its spinning qualities as in itself to afford an advantage over the foreign manufacture. There was no longer a demand for any but the common wools. The Saxon wool husbandry ceased with the manufacture of fine cloth which had called it into existence.

Under this tariff of 1846, even so conspicuous a free trade authority as Professor F. W. Taussig, of Harvard University,

acknowledges in his "Tariff History," page 145, that "The finest grades of woolens were not made at all." Imports of woolen manufactures, which had averaged about \$13,000,000 in value annually for the ten years previous, were \$19,392,871 in 1850, and rose to \$37,904,473 in 1854, and to \$43,141,988 in 1860. All that was left to American mills was the production of the cheaper fabrics made from the coarser wools, and the use of these wools continued. But the finer and more ambitious and profitable branches of the woolen manufacture were stifled in the United States, as the Southern authors of the hostile tariff policy had intended.

### Another revision in 1857.

The Democratic victory in the national elections of 1856 was followed by another tariff revision, in 1857. Those elections turned on the sectional slavery struggle, rather than on the tariff controversy. The ancient Whig opposition to the Democracy was thoroughly disorganized by that time, and the new Republican party had not gained the giant strength of a few years later. Therefore, the Democratic victory was a relatively easy one, and that victory was quickly utilized by the dominant Southern element for the framing and passage of another tariff law, which should be even more anti-protective than the original Walker law of 1846, if possible. Franklin Pierce, of New Hampshire, "a Northern man with Southern principles," as his Yankee adversaries called him, was then President. A Southern man and a free trader, James Guthrie, of Kentucky, was Secretary of the Treasury, and another Southern man, a violent foe to all protection, Jefferson Davis, of Mississippi, was Secretary of War. The Senate was Democratic two to one, and though Nathaniel P. Banks, of Massachusetts, a Republican, was the Speaker of the House, his Republican followers were in a clear minority, many of them being Democrats on all except the slavery issue.

Debate on the new tariff bill began in the House on January 13, 1857. One of the alert critics of the measure was Justin S. Morrill, of Vermont, whose name was destined a few years later to be imperishably associated with the Republican legislation whereby tariff for revenue only was abandoned for protectionism. But discussion in the House of 1857, with its anti-protectionist majority, was not very profitable. The bill was passed by the House on February 20, by a vote of 110 to 84. It was reported to the Senate on February 24, passed there after a single day's debate, and was signed by President Pierce on March 3, 1857—almost the last act of his Administration. The new law took effect on July 1, following.

The new tariff had generally lower rates than the Walker law, its predecessor. Yet, on the other hand, it added many important raw materials to the free list, and on this account was denounced as a "manufacturers' tariff," by some Representatives from Western agricultural constituencies, and on the final passage, New England, Pennsylvania, and New Jersey supported it. Here was a conspicuously low tariff, a professedly non-protective measure, sustained by manufacturing, protectionist communities. In the Senate the bill that passed received the votes of Charles Sumner and of Henry Wilson, of Massachusetts, the latter subsequently Vice-president of the United States.

## PROTECTIONISTS HAD NOT "SURRENDERED."

Such a strange division has naturally led to much misunderstanding and controversy since then. It has appeared to superficial observers that the protectionists in both houses of Congress "surrendered" on the tariff of 1857. As a matter of fact, they did no such thing. Like practical men they recognized that in both branches there was a decisive majority against them; that by no possibility could a genuine protective tariff be enacted until the grip of the South was broken in Washington. Thereupon, in the hurried debate, the protectionists of the North attempted to secure such favoring amendments of detail as were possible, and having gained them some voted for the bill and some against it, as they happened to prefer, with what to them seemed no yielding up of principle. The manufacturing States could not gain higher duties on the products of their industries, or, indeed, prevent those duties from being generally reduced. But a certain compensating advantage could be secured in another way, by further reductions of the rates on crude materials, or their transfer to the free list. So far as it could be done, this was accomplished, not in any hope of making a genuinely satisfactory measure but in order to minimize some of its injurious consequences. This may have been on the part of some public men a cynical and selfish rather than a broad and enlightened view of the great question involved in the long combat between protection and free trade, but it was a not unnatural view under the conditions that prevailed in the Washington of 1857. It is sufficient to explain why some men like Wilson who were afterwards known as eminent Republicans and protectionists voted side by side with irreconcilable Southern free traders for this nominal tariff for revenue only.

There was certainly in the manufacturing States of the North in general no approval of that measure as a whole. But to some industries, and notably to the woolen manufacture, it proved more favorable in some points than the tariff of 1846. Though the new law reduced the duty on woolen goods to 24 per cent, as compared with 30 per cent, it admitted free of duty all wools valued at not over 20 cents a pound, and fixed on other wools a duty of 24 per cent. As S. N. D. North says, in "A Century of American Wool Manufacture":

It was still an inequitable adjustment as to the higher priced wools, but as the mestizo and Cape wools, by reason of their cheapness, were exempted from all taxes at the custom-house, the manufacturers generally accepted the status thus established as an improvement over any which the law had fixed under any prior tariff since that of 1816.

#### HOW WAGES FELL.

But though free or freer raw wool might be of some advantage to the woolen manufacturer under the then existing inadequate duties on manufactured goods, and the indus-

try revived somewhat, it did not flourish because it could not flourish with inadequate protection and in the face of a general prostration of the national business. Even before the passage of the generally reduced tariff of 1857, the situaation was sufficiently depressing in the manufacturing States. · For one thing wages had inevitably been reduced to meet the tariff reductions. Thus, the wages of operatives in the cotton mills of Massachusetts were found to be lower in 1860 than in 1840 (Carroll D. Wright, in the "Forum" for October, 1893). Colonel Wright states again in the statistics of labor for 1895 that, "The wages of the operatives employed in the woolen mills of Massachusetts declined 7.7 per cent between 1837 and 1860." This was a result which the Southern authors of the tariff-for-revenue-only policy had deliberately sought, and publicly acknowledged. Some of them have been quoted in this article.

Nor was the depressed and despairing condition of the working people confined to Massachusetts or to New England. Said the "New York Herald," an anti-protectionist newspaper, on New Year's Day, 1855:

Seldom, indeed, within our recollection, has there been a year so darkly overshadowed by general calamities as the eventful and gloomy year which has just expired. The great financial and commercial panic of 1837 did not bring us, with all its train of bankruptcies, explosion and general ruin, so much positive suffering to the working classes of our great cities, as the combined causes which have brought about the existing lamentable financial and commercial depression.

The unemployed workingmen of New York had just met in public meeting, and memorialized the city government. "We are threatened with famine," they said. "We ask not alms, but work. We don't want a little soup now and some cast-off clothing to-morrow. But we do want work and the means of making an honest livelihood." One of the relief associations of New York reported in January, 1856, that it had assisted "6,622 families containing 26,896 persons, many of whom are families of unemployed mechanics," etc.

Laborers in Chicago were glad to work at that time for 50 cents a day. In Philadelphia, that great hive of industries, thousands sought the same wage, and "even then could not be employed." Such were the fruits of Southern dominance and tariff for revenue only. The boast that under the Walker tariff free white labor in the North would have to come down to the level of black slave labor in the Southern cottonfields was being abundantly fulfilled.

### HORACE GREELEY'S WORDS.

Horace Greeley in the "New York Tribune" of January, 15, 1855, has a pen picture of the misery of that period so true, so vivid, that it is one of the unforgettable passages in the English language:

Who is hungry? Go and see. You that are full fed and know not what it is to be hungry - perhaps never saw a hungry man - go and see. Go and see thousands, men and women, boys and girls, old and young, black and white, of all nations, crowding and jostling each other, almost fighting for a first chance, acting more like hungry wolves than human beings, in a land of plenty, waiting till food is ready for distribution. Such a scene may be seen every day between eleven and two o'clock around the corner of Orange and Chatham streets, where charity gives a dinner to the poor, and soup and bread to others to carry to their miserable families. On Saturday we spent an hour there at the hour of high tide. We have never seen anything like it before. Upward of a thousand people were fed with a plate of soup, a piece of bread and a piece of meat, on the premises, and in all more than sixteen hundred. On the same day one thousand one hundred and thirty portions of soup were dealt out from Stewart's "soup kitchen," eorner of Reade street and Broadway. At the rooms on Duane street for the relief of the poor, on the same day, they gave food to two thousand two hundred and fifty-six. In the Sixth ward alone over six thousand persons were fed by charity on Saturday, January 13. And this is only one day in one ward. Meanwhile, seenes of a like nature are being enacted all over the city.

The cry of hard times reaches us from every part of the country. The making of roads is stopped, factories are

closed and houses and ships are no longer being built. tory hands, road makers, carpenters, bricklayers and laborers are idle, and paralysis is rapidly embracing every pursuit in the country. The cause of all this stoppage of circulation is to be found in the steady outflow of gold to pay foreign laborers for the cloth, the shoes, the iron and the other things that could be produced by American labor, but which cannot be so produced under our present revenue system. The convulsion would have come upon us sooner but for the extraordinary demand in Europe for breadstuffs, growing out of huge famines and big wars, and but for the dazzling and magnificent discovery of gold mines in California, by which hard money, sufficient to buy an empire, has been called into existence and exported to Europe. If we could stop the import of the foreign articles, the gold would cease to flow out to pay for them, and money would then again become more abundant, labor would then again be in demand, shoes, clothing, and other commodities would then again be in demand, and men would then cease to starve in the streets of our towns and cities. If it be not stopped the gold must continue to go abroad, and employment must become from day to day more scarce, until where there are now many thousands we shall see tens of thousands of men everywhere crying: "Give me work! Only give me work! Make your own terms my wife and children have nothing to eat!"

## FRANKNESS OF PRESIDENT BUCHANAN.

All this was prior to the financial cataclysm of the autumn of 1857, when the successor to the tariff of 1846 was only a few months old. That panic, which men of business held to be a direct result of years of tariff for revenue only, began in September. President Buchanan, in his first message to Congress on December 8, 1857, was not yet willing to hold the new tariff law accountable for the fearful disaster with which he was confronted, but he was constrained to lament:

In the midst of unsurpassed plenty in all the productions and elements of national wealth, we find our manufactures suspended, our public work retarded, our private enterprises of various kinds abandoned, and thousands of useful laborers thrown out of employment and reduced to distress.

A year later, President Buchanan in his message of December, 1858, practically repudiated the tariff-for-revenue-only policy of his party and the South, and appealed to Congress to enact a new tariff measure, whose "incidental protection" "would, at the present moment, to some extent increase the confidence of the manufacturing interests and give a fresh impulse to our reviving business." This Democratic President went on to argue earnestly the advantage of specific over ad valorem duties — the specific duties which his Southern Democratic supporters had abhorred as too favorable to the Northern manufacturers!

Thus, even in the utterances of a Democratic Executive were the business men, the wage-earners, the protectionists, of the country coming into their own again. Southern leadership, and particularly Southern insistence on tariff for revenue only, had been faithfully tried for long years, under extraordinarily favorable circumstances, but had proved in the end a terribly costly delusion. It had prostrated the business of the nation and wreeked the credit of the government. All the teeming gold of California could not long stay the inevitable catastrophe. In that black autumn and winter of 1857, factories closed, warehouses were abandoned, banks failed all over the United States. A steady exportation of gold to pay for the abnormal imports of "cheap" foreign manufactured goods under the low non-protective duties of the Walker tariff had been draining and bankrupting the nation.

On January 1, 1856, it was disclosed that the banks of the United States, with deposits amounting to \$212,705,662, and circulating notes amounting to \$195,747,950, had only \$59,719,956 in specie, a reserve of only 14 per cent. The New England banks, which were the last to suspend specie payment, had against deposits of \$31,596,935 and circulation of \$47,762,301, only \$6,796,314 in specie, or a reserve of less than 9 per cent.

Southern cotton planters who flouted Northern business men had brought the country to this state of ruin. And in this connection, it is a serious thing to remember that the new present Democratic Executive, Mr. Wilson, a Southern man by birth and training, rejects the economic faith of Jefferson, Madison, and Jackson for the faith of Polk, Walker, and Calhoun.

## IMPORTATIONS EXCESSIVE AND RUINOUS.

Looking back on the years from 1846 to 1857 and to 1860, it is easy to read now the main cause of the disaster. It was over importation of foreign merchandise—an importation so large and abnormal that it could not be paid for by an export of cotton, grain, and provisions—for of these products Europe could take and would take so much and no more, without the slightest regard to the tariff policy of the United States.

In every year except two from 1847 to 1860 the balance of trade was against us. The total adverse balance of trade between 1846 and 1857 reached the then relatively enormous figure of \$312,100,180, and the adverse balance between 1857 and 1861, \$49,798.732 more. We could not pay for these excessive imports in goods, and so we paid for them in gold—the gold of California, the production of which from 1847 to 1860 amounted to \$651,889,085. When that was drained out of the United States, the crash came.

It is illuminating to look back now, and observe the process. Here is a compact parallel summary of the merchandise imports and exports of the tariff-for-revenue-only years from 1846 to 1857, the adverse balance of trade, the excess of exports of specie, and the gold production:

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	7	ř e	ir			Imports.	Exports.	Excess of Imports.	Excess of Exports of Specie.	Gold Production
1847						8122,424,349	<b>\$</b> 156,741,598	* \$34,317,249	** \$22,214,265	
1848						145,638,644	135,190,515	10,448,129	9,481,332	\$10,000,000
1849						141,206,199	140,351,172	855,027	**1,246,592	40,000,600
1850						173,509,526	144,375,726	29,133,800	2,894,212	50,000,000
1851						210,771,429	188,915,259	21,856,170	24,019,249	55,000,000
1852						207,440,398	166,984,231	40,456,167	37,169,091	60,000,000
1853						263,777,265	203,489,282	60,287,983	23,285,493	65,000,000
1554						297,623,039	236,959,560	60,663,479	34,342,162	60,000,600
1855							218,909,503	38,899,205	52,588,531	55,000,000
1856						310,432,310	281,219,423	29,212,887	41,537,853	55,000,000
1857						348,428,342	293,823,760	54,604,582	56,675,123	55,000,000

<sup>\*</sup> Excess of exports.

<sup>\*\*</sup> Excess of imports of specie.

#### GOLD DRAINED OUT OF THE UNITED STATES.

Here is clear proof of the way in which the tariff for revenue only of 1846 — the Walker tariff — drained America of gold — the life-blood of commerce. In the final year of this tariff — 1857— the enormous merchandise imports of \$348,—428,342, or three times the figure of 1847, rolled up so heavy an adverse balance of trade, that the excess of exports of specie to pay for this excess flood of foreign goods actually amounted to more gold than was produced in that entire year from all the mines of California. Steadily year by year an insufficient tariff had been encouraging abnormal imports of "cheap" merchandise from Europe, and steadily year by year these abnormal imports, which had to be paid for, were drawing a broader and deeper golden stream out of the United States.

Exports increased during this period, it is true, but, as has been shown, these were due in several of the years to the extraordinary demands of famine and war in Europe, not to tariff for revenue only. These exports did not increase as imports did, and did not nearly equal the displacement of domestic products by these imports. Nor could the exports compensate for the loss of domestic demand for those identical kinds of commodities which were cut off by the discouragement of domestic manufactures. The unfavorable balance of trade and the exports of specie were symptoms of the real disease, which was loss of employment, or employment at greatly reduced wages, and loss of earnings on capital — all of these reducing the purchasing and consuming capacity of the country for the very things which, for lack of an adequate home market, had to be exported.

The richest nation on earth could not long withstand such a terribly weakening process, which did not end with the life of the tariff of 1846, but continued through the life of its ill-fated successor, the tariff of 1857. Here is a summary of the imports and exports, the adverse balance of trade and the net loss of specie from 1857 to the restoration of protection just before the Civil War:

	7	ře:	ır.			Imports.	Exports.	Excess of Imports.	Excess of Exports of Specie.	Gold Production
1858 1859							\$272,011,274 292,902,051	* \$8,672,620	\$33,358,651	\$50,500,000
1860						353,616,119	333,576,057	38,431,290 20,040,062	56,452,622 57,996,104	50,100,000 46,150,000

#### MERCHANDISE.

#### THE PANIC OF 1857.

The crash of 1857 temporarily reduced the imports of 1858, but, after its worst severity was passed, "cheap" foreign merchandise poured in again and gold poured out, to the renewed impoverishment of the country. There had been as a whole a sufficient revenue under the tariff of 1846—so long as there was California gold to pay for enormous purchases of goods, these goods produced an income at the customs houses. But by 1857 the drain of gold abroad had exhausted the country, though that drain continued for several years more. From and after the panic of 1857, the imports, though large, were not large enough with the generally reduced duties to provide an adequate revenue. Between 1858 and 1861 there was a deficiency of \$75,863,808 in the finances of the government.

Thus, this long tariff-for-revenue-only period closed in utter disappointment and disaster, though the vast yield of riches from the California gold fields, and the epoch-making American inventions already alluded to, that had been introduced before the beginning of the tariff-for-revenue-only era, should have made it the most prosperous period in the history of the United States. Under the protective tariff from 1842 to 1846, there had been prosperity in agriculture and in manufactures. The revenue had been abundant, and though there had been only an almost inappreciable production of precious metals, the stock of specie in the country had increased by many millions of dollars. The public debt, which stood at \$32,742,000 in 1843, had been reduced in 1846 to \$15,550,000. "Thus," says Mr. Stanwood, in his

<sup>\*</sup> Excess of exports.

tariff history, "the act vindicated itself in every possible way, and was satisfactory to all men save the politicians who were resolved to overthrow it."

They did overthrow it, as we have seen, in 1846. By 1860 they had swollen the national debt to \$64,640,838. They had converted the redundant revenue into a great deficit, had transformed a favorable balance into an adverse balance of trade of \$361,898,912, and had forced out of the country to pay for this enormous excess of imports several hundred millions of new California gold. Between 1847 and 1860, the California mines yielded a total product of \$651,889,085, and in this same period the net excess of exports over imports of coin and bullion was \$406,519,311. President Buchanan himself, in his message to Congress at the end of this dark period, on December 14, 1860, said:

Panic and distress of a fearful character prevail throughout the land. Our laboring population is without employment and consequently deprived of the means of earning bread. Indeed, all hope seems to have deserted the minds of men.

#### LINCOLN AND PROTECTIONISM.

Thus fell the tariff-for-revenue-only policy, its epitaph fittingly pronounced by a Democratic President. The new Republican party under Abraham Lincoln had won the national elections of 1860. Lincoln was a strong, outspoken protectionist. All his life he had been advocating the "American system" of Washington, Hamilton, Webster, and Clay. The characteristic words in which Lincoln voiced his economic faith will never be forgotten:

I do not know much about the tariff, but I know this much: When we buy manufactured goods abroad we get the goods and the foreigner gets the money. When we buy the manufactured goods at home we get both the goods and the money.

And this is the significant platform on which Lincoln stood when he was elected to the Presidency:

While providing revenue for the support of the General Government by duties upon imports, sound policy requires

such an adjustment of these imposts as to encourage the development of the industrial interests of the whole country. We commend, therefore, that policy of national exchanges which secures to the workingman liberal wages, to agriculture remunerative prices, to mechanics and manufacturers adequate reward for their skill, labor and enterprise, and to the Nation commercial prosperity and independence.

This frank protectionist declaration was the one logical and inevitable statement for the Republican party to adopt. The great industrial North was the backbone of the Republican, Union anti-slavery party, notably the two conspicuous protectionist Commonwealths of Massachusetts and Pennsylvania, which had terribly suffered under the tariff-forrevenue-only policy and now saw their day of redemption at hand. Mr. Blaine, in his "Twenty Years in Congress," points out clearly and convincingly that it was the firm protectionist stand of the Republican party which made the election of Lincoln possible. Pennsylvania, a pivotal State, held its State election in October, 1860. Mr. Curtin, the Republican candidate, appealed to the voters on the tariff issue, proclaiming that a Republican victory meant a restoration of the protective system. He won a decisive victory, which gave heart of courage to the Republican cause throughout the nation. It showed the unmistakable trend of popular opinion, and after that October balloting in Pennsylvania one month in advance, the success of Mr. Lincoln at the November polls was everywhere accepted as assured.

#### PROTECTION RESTORED BEFORE THE CIVIL WAR.

Already, even before October, 1860, the American people had been given a proof of the Republican purpose. Though the Republican strength in the National House of Representatives was in 1860 insufficient to give complete control, one of the Republican leaders, Justin S. Morrill, of Vermont, introduced on March 12 a new tariff bill, which another Republican leader, John Sherman, of Ohio, Chairman of the Committee on Ways and Means, brought before the House. It was passed on May 10, 1860, nearly a year before the firing

on Fort Sumter. This tariff bill, the first Morrill Act, was not in any sense a war or war-revenue measure. It was a protective tariff bill, in which a significant change was made to specific duties, always favored by protectionists in preference to the ad valorem rates of the tariffs of 1846 and 1857. This was a measure of profound importance. As Hon. J. H. Gallinger, the senior Senator from New Hampshire, has lately said of this very measure in the Senate (September 2, 1913), the first Morrill tariff was not war legislation but "a frank repudiation of the tariff-for-revenue-only policy." Senator Gallinger added:

It cannot be affirmed too strongly or too constantly that the abandonment of the Southern Democratic policy as we now know it was due not to any anticipation of the Civil War or to any consequences of the Civil War, but to the bankruptcy to which free trade had brought the Nation, and the ruin and distress into which it had plunged our manufacturers and farmers in its culminating years from 1857 to 1860. Nothing is more manifest from all the records of history than that the country would have returned to the protective system of Washington, Hamilton, Madison, Monroe, and Jackson in 1860, even if there had been no Civil War.

The tariff-for-revenue-only scheme had utterly failed by 1860, and had confounded and discredited its authors quite as signally and even more quickly than that later experiment of the same kind in the years between 1894 and 1897.

It is further emphatically true, as Senator Gallinger declared in the same speech, that "It was absolutely inevitable that when the great industrial North, with its free labor, wrested from the South, with its slave labor, the control of the National Government the overwhelming protectionist sentiment of the North should write its convictions upon the national statute books." The will of the protectionist North could not be made immediately effective, because the United States Senate in 1860 was still controlled by the adherents of slavery and free trade, but when Congress assembled for the winter session of 1860–1861 South Carolina had seceded, ten Senators from other Southern States soon left, and the Sen-

ate became Republican. Immediately the Morrill tariff bill as passed by the House at the previous session was taken up, and after debate was passed on February 20, 1861, with amendments on which concurrence was reached with the House of Representatives. The bill was signed by President Buchanan on March 2 and became a law on April 1, 1861. The first of the war tariffs was not passed until August 5. The nation was again squarely on a protectionist basis before the war began.

#### TRIUMPH OF THE INDUSTRIAL IDEA.

It had been deliberately put on a protectionist basis in a time of peace, by the joint action of a Republican Congress and a Democratic President, because an experiment in tariff for revenue only, forced upon the industrial North by the slaveholding South in 1846 and maintained for fifteen years, had robbed the country of the rich boon of California's gold, crippled the industries of the nation, demoralized its finances and destroyed its credit. Let us quote again the memorable words in which President Buchanan portrayed the condition of the country at the end of this decade and a half of anti-protectionist ascendency:

Panic and distress of a fearful character prevail throughout the land. Our laboring population is without employment and consequently deprived of the means of earning bread. Indeed, all hope seems to have deserted the minds of men.

The first Morrill protective tariff, of 1860–1861, marked the end of that terrible distress which Southern tariff for revenue only had created. The new law embodied the economic principles of Massachusetts and Pennsylvania, of the free industrial North, triumphing over the ideas of South Carolina and Mississippi. Protectionism was not reëstablished by the Civil War. It was reëstablished before the war, and intrenched by the results of that war. When Southern public men who were responsible for that disastrous trial of tariff for revenue only left Washington and went out of the

Union, they wrote into their Confederate Constitution the free trade which they had not been able to perpetuate as the national policy of the United States.

For a generation after 1860, protectionism remained dominant in our national legislation. It was not overthrown until the Gorman-Wilson tariff law of 1894, framed again by Southern statesmen, and so instantly fruitful of disaster that the political party responsible for it received the most fearful defeat ever inflicted in time of peace in all American history, and the Gorman-Wilson law was repealed after three destructive years, in 1897. Now, after sixteen years more of protection, a tariff-for-revenue-only policy has once more been revived by Southern public men, in the Simmons-Underwood legislation, an even more extreme measure than the fateful law of 1894.

It is only fair to recognize, however, that these Southern public men who have framed this new law now represent only a fraction of the South and not the whole South. That section of the country, with slavery eliminated and free labor honored, has shared in the benefits of long years of adequate protection. On the one hand now are the progressive Southern business men and increasingly prosperous workingmen and women, and on the other a relatively small number of Southern political leaders still obsessed with the economic fallacies of their predecessors of the ante-bellum generation and apparently incapable of realizing the changed conditions that have come about in their own communities under the economic system which they are in such eager haste again to overthrow.

President Wilson, a Southern man by birth, inheritance, and convictions, in his advocacy of free trade and hatred of protection, represents the spirit of the old South and not of the new South. He and his party have again challenged and temporarily overthrown the tariff policy founded by Washington, Hamilton, and Jefferson and restored under Lincoln—and history will again speedily repeat itself and prove that Lincoln and his friends were right.

### ACTIVE AND IDLE MACHINERY.

RESULTS OF THE FIRST OF A SERIES OF QUARTERLY INQUIRIES BY THE NATIONAL ASSOCIATION.

Believing that an accurate idea of the proportion of woolen machinery in operation and idle in the United States from time to time would be valuable to American manufacturers and to those who do business with them, the Executive Committee of the National Association of Wool Manufacturers has directed the Secretary to compile quarterly a statement of the looms, spindles, cards and combs, active and unemployed, in the one thousand and more woolen mills of the country.

In response to this direction, circulars were sent out at the end of November from the office of the Association in Boston to all American woolen mills, requesting the necessary information from each. It was carefully explained in these circulars that the methods employed in the receipt and tabulation of the answers would be such as to make it impossible for any one, even for those who did the compiling, to identify the figures reported by any given establishment. To carry out this purpose the blanks for the machinery statements accompanying the circulars were distributed without any number or other distinguishing mark, and it was expressly stated in the circulars that the blanks need not be signed in any way, and that instead of making a complete return on one blank the figures for any mill could be proportionately divided and reported on two or more blanks, to be separately forwarded to the office of the Association. As many as three blanks were enclosed with every circular, making it possible to divide the statement into so many sub-divisions that there could be no possible identification of any mill by the amount of machinery reported. Moreover, it was stated that the blanks need not be mailed from the home post-office, but could be forwarded from the mill's office or correspondent in New York or elsewhere.

It is gratifying to state that the immediate result of the inquiry has been a general and painstaking response. In some cases mills reported the percentage of their machinery employed and idle, but did not give the number of looms, spindles, cards or combs. In such cases as these the returns. of course, had to be omitted, because, there being no way to identify the mills from which these defective returns had come, correction could not be obtained, but as a whole the responses were made in exactly the form desired. It is believed by the officers of the Association that the information resulting will prove to be of as much practical value to those interested in the woolen manufacture as statements of bank clearings and money reserves are to bankers or as data relative to freight tonnage, gross earnings and idle cars to railway managers. It is the plan of the Association to send out another inquiry of the same kind in a few weeks, and at quarterly intervals thereafter, so that the reports will progressively increase in value.

The first returns covered a very large majority of all of the machinery employed in the wool manufacture in the United States, and it is hoped that the next returns will embody an even larger proportion, so that the results may indicate even more precisely the condition of the industry as a whole. It should be noted that the printed summaries will in every case be sent not only to all of the mills included in the National Association of Wool Manufacturers, but also at the same time to those who are not members, and to others known to be interested in the industry. The idea is to give the widest possible circulation to the information gathered each quarter.

The results of the first enquiry as to the proportions of woolen machinery in operation and unemployed on December 1, 1913, were mailed to the entire trade on December 20, and 21, and are summarized as follows:

V	Total Number	luOperation.	Idle.	Per Cent of Idle to	
Machinery.	Reported. December		r 1, 1913.	Total.	
Looms, wider than 50 inches	39,254	29,471	9,783	24.9	
reed space Looms, 50 inches reed space, <sub>1</sub>	00,201	20,111	0,100	21.0	
or less	11,984	8,722	3,262	27.2	
Looms, carpet	2,683	1.821	862	32.1	
Woolen cards, sets	2,915	2,292	623	21.4	
Worsted combs	1.717	1,320	397	23.1	
Woolen spinning spindles	906,250	700,306	205,944	22.7	
Worsted spinning spindles	1,592,004	1,178,815	413,189	26.	

STATEMENT OF THE OWNERSHIP, MANAGEMENT, ETC.,

Of Bulletin of the National Association of Wool Manufacturers, published quarterly at 683 Atlantic Avenue, Boston, Mass., required by the Act of August 24, 1912.

Editor, Winthrop L. Marvin, 683 Atlantic Avenue, Boston, Mass.

Publisher, National Association of Wool Manufacturers, 683 Atlantic Avenue, Boston, Mass.

Owners, National Association of Wool Manufacturers, 683 Atlantic Avenue, Boston, Mass. (The National Association of Wool Manufacturers is a voluntary association, not a corporation under the law. It has no stockholders, but members regularly elected.)

There are no bonds, mortgages or securities of any other kind.

WINTHROP L. MARVIN,

Editor.

Sworn to and subscribed before me this 3d day of January, 1914.

WILLARD A. CURRIER, Notary Public.

(My commission expires May 15, 1914.)

#### PRICES OF YARNS AND CLOTHS.

# A RECORD OF MARKET QUOTATIONS ON CERTAIN STANDARD MANUFACTURES.

CONTINUING a plan initiated in a recent number of the Bulletin, there is presented below a record of prices of certain standard cloths and yarns — the prices of yarns running back to the year 1905. Constant changes of fashion make it difficult to ascertain and publish prices of cloths that are comparable from year to year - such as are largely used at any one time may, at another, be known only as a memory. For this reason there is no continuity whatever in fancy fabrics, and even so-called staple goods often cease for long periods to have any general use; at such times the prices quoted for them are merely nominal. It is believed, however, that a comprehensive list of staple goods, including a considerable variety of kinds, will, in its entirety, fairly represent the course of prices from year to year, although comparisons of individual fabrics included in the list may be without significance.

The table of cloth prices which follows represents an attempt to compile such a list; and, with a view to its improvement for use in future issues of the Bulletin, manufacturers are requested to suggest to the editor any additions or corrections which will make it a more accurate and useful record. Prices of fabrics for each of the six months' periods of 1913, with a statement of width, weight and quality of material from which the fabrics are made, will be gratefully received, and care will be taken that the information thus furnished shall not be disclosed.

## PRICES FOR WOOLEN AND WORSTED CLOTHS.

Discounts deducted to reduce as nearly as practicable to a uniform net basis for 30-day terms.

The fabrics included in this list are all of good quality and pure wool.

Prices are per lineal yard.

Ño.	Trade Name.	Quality.	Weight per Lineal Yard.	Widtb.	Prices First 6 Months, 1913.	
1.	Clay diagonal.	k blood.	12 oz.	56"	81.24	\$1.19
2.	Clay diagonal.	i blood.	14 oz.	560	1.35	1.28
3.	Clay diagonal.	å blood.	16 oz.	56//	1.46	1.40
4.	Serge.	å blood.	11 oz.	56"	1.07	.95
5.	Serge.	å blood.	14 oz.	56//	1.00	.90
6.	Flannel, blue.		14 oz.		1.17	1.17
7.	Flanuel, white.			36"	.70	.70
8.	Thibet.		12 oz.	56//	.88	.79
9.	Venetian.		14 oz.	56"	1.20	1.13
0.	Kersey.		30 oz.	54	2.20	2.25
1.	Kersey.		26 oz.	54"	2.13	2.13
2.	Covert.		16 oz.	56"	2.37	2.37
	GOVERNMENT GOODS:					
	(Army):					
1.	Olive drab flannel.	½ blood.	8½ oz.	54/56	Feb., .99.	July, .87.
2.	Melton.	🖁 blood.	$13\frac{1}{2}$ oz.	56/58"	May, .93.	
3.	Melton.	3 blood.	16½ oz.	56/58"		July 1, .2
4.	Melton.	🖁 blood.	30 oz.	56/58"		
	(Marine Corps):	_	8 oz.			
0.	Shirting flannel (kbaki).	$\frac{1}{2}$ blood.		54"	Jan. 1, $.07\frac{1}{2}$ .	
1.	Flannel, winterfield.	$\frac{1}{2}$ blood.	13/14 ozs.	54"	Jan. 1, .18.	Aug. 1, .1
2.	Jacket cloth, dark blue.	$\frac{1}{2}$ blood. $\frac{1}{2}$ and $\frac{3}{4}$ blood.	14 oz.	54"	Jan. 1, .45.	
3.	Coat cloth, dark blue.	and full	20 oz.			
4.	Kersey, winterfield.	k blood.	14/15 ozs.	54		<i></i> .
5.	Kersey, winterfield.	i blood.	22 oz.	54	Jan. 1, .74.	Aug. 1, .4
ö.	Blanket, winterfield, 7/ x	å blood.	46/51 ozs.	l		Aug. 2, .
	5' 6"		each.	1	, ,	each.

PRICES FOR CERTAIN STANDARD WORSTED YARNS. Below are Boston market quotations on certain standard worsted yarns from January 1, 1905, to January 1, 1914:

	2/24-3.	2/32—4.	2/40—X.	2/50—XX
an. 1, 1905	\$0.79	\$0.90	\$1.04	\$1.24
April 1, 1905	.77	.86	1.04	1.24
uly 1, 1905	.81	.90	1.09	1.31
Det. 1, 1905	.84	.94	1.18	1.38
an. 1, 1906	.84	.97	1.20	1.37
pril 1, 1906	.84	.97	1.20	1.37
uly 1, 1906	.84	.97	1.20	1.37
Oct. 1, 1906	.83	.97	1.20	1.34
an. 1, 1907	.83	.96	1.18	1.34
pril 1, 1907	.85	.99	1.20	1.35
uly 1, 1907	.84	.99	1.20	1.35
Oct. 1, 1907	.83	.95	1.18	1.33
an. 1, 1908	.83	.95	1.18	1.33
pril 1, 1908	.74	.84	1.08	1.28
uly 1, 1908	.72	.82	1.00	1.24
Oct. 1, 1908	.72	.82	1.00	1.24
an. 1, 1909	.78	.90	1.15	1.37
pril 1, 1909	.82	.96	1.18	1.38
uly 1, 1909	.82	.96	1.22	1.40
Oct. 1, 1909	.96	1.06	1.32	1.50
an. 1, 1910	.94	1.08	1.32	1.50
pril 1, 1910	.88	1.02	1.25	1.40
uly 1, 1910	.83	.95	1.10	1.30
Oct. 1, 1910	.78	.93	1.05	1.30
an. 1, 1911	.80	.92	1.075	1.30
pril 1, 1911	.75	.86	1.05	1.22
uly 1, 1911	.73	.86	1.00	1.18
Oct. 1, 1911	.73	.86	1.00	1.18
an. 1, 1912	.74	.86	1.00	1.17
pril 1, 1912	.76	.90	1.05	1.22
uly 1, 1912	.78	.90	1.08	1.25
et. 1, 1912	.84	.98	1.15	1.32
an. 1, 1913	.84	.98	1.15	1.32
pril 1, 1913	.81	.93	1.10	1.25
uly 1, 1913	.73	.82	1.00	1.18
et. 1, 1913	.71	.82	1.00	1.18
an. 1, 1914	.59	.70	.90	1.05

Note.

3 = 1/4 Blood Stock.

4 = 3/8 " "

X = 1/2 " "

X = 1/2 " "  $X\widetilde{X} = \widetilde{Fine}$  Medinm Stock.

## Obituary.

#### RUDOLPH KLEINJUNG.

Mr. Rudolph Kleinjung, the secretary and general manager of the New Jersey Worsted Spinning Company, of Garfield, N.J., died on November 26, 1913, after an illness of a few days. Mr. Kleinjung was a native of Krefeld on the Rhine in Germany. born in the year 1858. He attended the elementary schools and also the "Gymnasium" or high school of Krefeld, and completed his studies in mechanical and civil engineering at the university in Aachen. Mr. Kleinjung was for many years an officer of the reserve of the German army, and was stationed for a long time in the city of Dresden, Saxony. He obtained his practical knowledge of manufacturing in worsted varn spinning companies located at Wilkau and Meerane, Saxony, and subsequently was the manager of a spinning company in Leipzig. The last position which he held in Germany was as general manager of a wool combing establishment in Leipzig, where he remained for fifteen years. In the year 1905 the building and equipment of the New Jersey Worsted Spinning Company's plant at Garfield were begun under his supervision, and he became the general manager on the completion of the plant.

Mr. Kleinjung was a thorough manufacturer and a capable executive. He had made the New Jersey Worsted Spinning Company's plant a model of its kind in America. His untimely death in the prime of his activities is deeply mourned in Passaic and its vicinity.

At a special meeting of the National Association of Wool Manufacturers in Boston on December 11, 1913, the following resolutions in regard to the death of Mr. Kleinjung were presented by Mr. Thomas Oakes, of Thomas Oakes & Company, Bloomfield, N.J., seconded by Mr. Franklin W. Hobbs, the president of the Arlington Mills, Lawrence, Mass., and adopted on a silent rising vote:

Resolved, By the National Association of Wool Manufacturers, that we record our profound regret at the death of Mr. Rudolph Kleinjung, general manager of the New Jersey Worsted Spinning Company, an accomplished manufacturer, who had won well-merited success in his calling, first for many years in Europe and later in the United States.

Resolved, That we assure the friends and associates of Mr. Kleinjung of our heartfelt sympathy with them in their bereavement, and that a copy of these resolutions be transmitted to them and included in the minutes of this meeting.

#### CHARLES W. AMORY.

Mr. Charles W. Amory, who died at his residence in Boston on Wednesday, November 5, 1913, had been the president of the Amoskeag Manufacturing Company and of the Great Falls Manufacturing Company, and for many years was a conspicuous figure in the textile industries of this country. Mr. Amory was born in Boston, October 16, 1842, the son of William and Anna (Sears) Amory. At the age of twenty-one he was graduated from Harvard College, and soon after entered the Federal service in the Civil War as a second lieutenant of the Second Massachusetts Cavalry. He was captured by the Confederate forces in July 1864, but was paroled in the following October, and in December, 1864, he rejoined his regiment as a first lieutenant at Winchester, Va., and took part in the cavalry operations under Sheridan in the great closing Virginia campaign. He was promoted to a captaincy in June, 1865, and was mustered out on August 1. For a time he traveled in Europe, and, returning to Boston, connected himself with the dry goods house of Haughton, Perkins & Company. On January 1, 1868, Mr. Amory formed a partnership with H. C. Wainwright, under the firm name of Wainwright & Amory, brokers. In 1880 he was elected treasurer of the Amory Manufacturing Company, and in 1882 he became treasurer of the Langdon Manufacturing Company. also a director of the Cocheco Manufacturing Company, the Lawrence Manufacturing Company, and the Lyman Mills.

Outside of the textile business Mr. Amory was actively identified with many important undertakings. He was president of the Fifty Associates of Boston; vice-president of the Provident Institution for Savings; a director of the American Bell Telephone Company and the American Telephone & Telegraph Company, the Western Telephone & Telegraph Company, the Bay State Trust Company, the Old Colony Trust Company, the Merchants' National Bank, the Western Electric Company, the Edison Electric Illuminating Company of Boston, the Boston Manufacturers' Mutual Fire Insurance Company, and the Massachusetts Hospital Life Insurance Company.

Mr. Amory was married on October 23, 1867, to Miss Elizabeth Gardner, daughter of George Gardner, of Boston. Mrs. Amory survives him, with two sons, William Amory and George Gardner Amory, and one daughter, Mrs. T. Jefferson Coolidge, Jr. Mr. Amory was a member of the Somerset and Country Clubs.

#### LEWIS ANDERSON.

Mr. Lewis Anderson, one of the oldest and best known woolen manufacturers of New England, died at his home in Skowhegan, Me., on Monday, November 10, 1913, at the age of seventyeight years. Mr. Anderson was one of the many expert and successful woolen men who have come to this country from their native Scotland. He was engaged first as a young man with the Roy Manufacturing Company of Troy, N.Y. Many years ago he established himself in business at Skowhegan, with the hearty and generous encouragement of local merchants and capitalists. His mills were known as the Coburn Woolen Mills. Mr. Anderson gained a position of influence and leadership among his fellow-manufacturers, and was instrumental in organizing the Maine Woolen Manufacturers' Association, a numerous and powerful body. Mr. Anderson for many years also was an active member of the National Association of Wool Manufacturers and of its Executive Committee.

Mr. Anderson's mills prospered under his able management. They attracted the attention of Mr. William M. Wood when the American Woolen Company was founded in 1899, and Mr. Wood purchased the property, changing the name to the Anderson Mills, and retaining Mr. Anderson for three years as the manager. When Mr. Anderson retired he was succeeded in charge of the mills by Mr. Frank H. Carpenter, now the general agent of the American Woolen Company.

Mr. Anderson was a thirty-second degree Mason and a Knight Templar. He leaves a son, Colonel Thomas Anderson of Portland, a daughter, Miss Sadie Anderson of Skowhegan, and a nephew, Louis A. Anderson, the treasurer of the Hadley Mills, South Hadley Falls, Mass.

#### EDMUND CORCORAN.

Mr. Edmund Corcoran, the manager of the Shaekamaxon Mills in Philadelphia, died on Monday, November 3, 1913, after a long illness. Mr. Corcoran was an able practical manufacturer

of broad experience. He was born in Hampden, Mass., on September 5, 1855, and began in his boyhood to work in a woolen mill. When twenty-four years of age he was a loom-fixer for the Hockanum Company at Rockville, Conn., and he was promoted to the position of boss weaver there. From Rockville he went to the well-known Weybosset Mills, in Providence, where he became assistant superintendent. Later he returned to Rockville to succeed the late James T. Sykes as superintendent of the Hockanum Mills. Leaving Rockville again Mr. Corcoran went to Rhode Island to be the agent of the Manton Woolen Mills of the American Woolen Company. He was subsequently agent of the Weybosset Mills and of the American Woolen Company's mills in Fitchburg, whence he went, about eight years ago, to be the manager of the Shackamaxon Mills at Philadelphia. Four years ago Mr. Corcoran started the Rockville Worsted Company in Rockville.

Mr. Corcoran leaves a widow and one son, Thomas M. Corcoran, of Philadelphia, who has been associated with his father in the Shackamaxon Mills. A great many friends mourn Mr. Corcoran, whose career has manifested remarkable industry and fidelity to duty.

#### PAUL W. STURSBERG.

A most promising young New England manufacturer, Mr. Paul W. Stursberg, of the Germania Woolen Mills of Holyoke, Mass., died at his home in Holyoke on November 4, 1913. Mr. Stursberg had been ill for several months, but his death was due to meningitis, which developed two weeks before his death. was a native of Lowell, Mass., and was twenty-eight years of age, the only son of Mr. and Mrs. Herman Stursberg and a nephew of William Stursberg, of W. Stursberg, Schell & Company. Mr. Stursberg was educated in his native city of Lowell and attended the Lowell Textile School, following up his studies there by a two years' residence in Germany where he observed German woolen manufacturing methods. Entering the Germania Mills at Holyoke, Mr. Stursberg took charge of the worsted department, and proved a faithful and efficient manager. mother and father survive Mr. Stursberg, as do a sister, Mrs. Herman Mayer, of Mannheim, Germany, and a widow. Mr. Stursberg had been married only two years before his death.

## Editorial and Endustrial Miscellany.

Beginning with this issue the publication months of the Bulletin will be January, April, July and October. In order to make this change, which brings the Bulletin into line with the usual practice of quarterly periodicals, but three Bulletins were issued in the past year 1913, for which due allowance will be made to subscribers and advertisers.

#### A TEXTILE CUSTOMS BUREAU.

WOOLEN AND COTTON MANUFACTURERS JOIN TO AID A STRICT ENFORCEMENT OF THE NEW TARIFF LAW.

ONE cause of grave concern in the new Simmons-Underwood tariff, aside from the sheer inadequacy of the various rates, is that these rates are generally not of a specific but of an ad valorem character. This is what was anticipated, for with a tenacity that would have been admirable in a different cause, the authors of the new tariff law have harked back not only to the principles but to the details of construction of the old Southern Democratic Walker tariff of 1846, described at length in other pages of this Bulletin.

Former leaders of Southern political thought, like opponents of the protective system generally, have always favored ad valorem in preference to specific duties, although these ad valorem duties make it "easier" for importers and foreign manufacturers, and incidentally, of course, a great deal harder for American manufacturers, and for the Treasury of the United States. The impressive expert testimony of Secretaries of the Treasury, Robert J. Walker almost alone excepted, from Gallatin in 1801 to to-day — including the evidence of President Cleveland's great Secretary, Daniel Manning — is for specific rather than ad valorem rates as more exact and certain of collection, and all the great advanced modern nations, including the United Kingdom in its tariff for revenue only, rigidly adhere to the specific principle.

But a tariff mainly ad valorem is now the law of the United States, and in the woolen and cotton schedules the danger of fraudulent undervaluation of imported goods is particularly serious. Face to face with this situation, the leaders of these American textile industries have been considering the need of an informed and systematic effort to cooperate with and support the officials of the government in an honest enforcement of the law, and a permanent organization is now being effected for that purpose.

At a special meeting of the National Association of Wool Manufacturers, held in Boston on December 11, 1913, a resolution was unanimously adopted placing at the disposal of the officers of the Association a considerable sum of money for the year 1914, in order that coöperation might be had with other textile interests for the creation and maintenance of a Customs Bureau, whose business it shall be to discover and help to prevent the fraudulent undervaluation of imported textile products so unfortunately invited by the purely ad valorem form of duties under the new tariff law.

Similar action has been or is being taken by the American Association of Woolen and Worsted Manufacturers, the National Association of Cotton Manufacturers, the Arkwright Club, and the American Cotton Manufacturers' Association. The leaders in the movement have conferred with Mr. John P. Wood, the President of the National Association of Wool Manufacturers, in regard to assuming the direction of the work of the new Bureau in connection with his other activities for the advancement of the textile trades. There can be no question of the need of a Customs Bureau to supplement the efforts of the appraisers and other customs officials at the principal ports of entry, and it is well understood that the expert assistance of the manufacturers will be cordially welcomed by officials of the government.

The movement is undertaken with a frank recognition of the fact that hearty coöperation may be anticipated from honorable importers and scrupulous European manufacturers, who tell the truth in their invoices and have a very large interest in being protected against the lawless practices of unfair competitors. Honest men on both sides of the Atlantic, identified with either the European or the American industry, will not find it difficult to agree that whatever the tariff rates may be they should be fully and unvaryingly collected. American manufacturers have no

distrust of the Treasury Department in the new Administration. They regard Secretary McAdoo and Assistant Secretary Hamlin particularly as competent and faithful guardians of the revenues, and the present movement represents a sincere effort to work with them for an impartial and precise enforcement of the new Federal legislation.

To render effective service, the Textile Burean will need the aid and cooperation of the members of its constituent associations in obtaining information upon which to formulate its work. For this purpose members are requested promptly to communicate particulars of any circumstances coming to their attention which indicate a probability of undervaluation of imported manufactures of wool or cotton: also any questions concerning the interpretation of the existing tariff law and customs regulations, respecting woolen or cotton products.

Pending the opening of an office in New York City, correspondence relative to the work of the Tariff Bureau can be addressed to the Secretary of this Association or to:

The Director,
Textile Bureau.
521 North 22d Street.
Philadelphia.

#### A STATEMENT OF PRESENT FACTS.

THE ACTUAL CONDITION OF THE AMERICAN WOOLEN INDUSTRY AS THE NEW TARIFF IS BECOMING EFFECTIVE.

This issue of the quarterly Bulletin for January, 1914, appears at a time when the reduced duties on wool manufactures contained in Schedule K of the Simmons-Underwood tariff law of October 3, 1913, are in the first weeks of their operation—the taking effect of free raw wool having been deferred by special provisions of the law to December 1, 1913, and of the new rates on woolen goods to January 1 following. This new tariff law embodies an important departure for the woolen industry of the United States, and it seems desirable that for the sake of future reference there should be some definite record of the condition of the American wool manufacture in the past few months while the precise terms of the new legislation have been known, and at the present time, when these terms have become an actuality.

Since the enactment of the new tariff law last October, many woolen mills have remained fully employed, and a great many others have had the most of their machinery in operation, though many others still have been running at a much reduced capacity. In order to understand these circumstances, that may well be noted now when they are fresh in mind, it is necessary to review the experience of the industry for the past three unsettled and eventful years.

Both in 1911 and in 1912 special bills for the revision and reduction of the wool and woolen schedule were under consideration by a Congress known to be hostile to the terms of the Aldrich-Payne tariff. In both of these years these bills were actually passed by both House and Senate, and failed of becoming law only by the prompt interposition of the veto of President Taft. The uncertainty which existed while these bills were being discussed naturally enforced a restriction of business in both periods.

Moreover, the serious and protracted strike at Lawrence in the early months of 1912, affecting several of the largest woolen mills in the country, and the similar disturbances that followed at Passaic and elsewhere, served considerably to reduce the production of woolen fabrics.

In the first months of the following year, 1913, a great strike developing much bitterness prevailed among the garment workers of New York and other Eastern clothing centers. It is the manufacturers of ready-to-wear clothing who are the principal customers of the woolen mills of the United States, and the partial paralysis of the clothing industry for several months compelled a further and very great lessening of the production of woolen fabrics.

Finally, when the usual time came in June and July, 1913, for the taking of orders for woolen goods for the spring season of 1914, the entire Underwood tariff bill, providing for free raw wool and a radical reduction in the duties on all kinds of woolen goods, had been passed by the House of Representatives and was awaiting the action of the Senate. The enactment of the measure was assured, and it was anticipated that it might receive the signature of the President and be made at once effective, as Chairman Underwood desired, in time to apply to all goods required for the coming spring season. But unforeseen delay in the Committee on Finance, the Democratic Senatorial caucus and the Senate itself held up the final passage of the

measure until October 3 — and then in the conference committee the House leaders had yielded and the reduced woolen duties were not to take effect, as has been said, until January 1, 1914.

At first, in the earlier summer, while the date of enactment and the exact provisions of the new tariff bill were uncertain, the placing of orders for spring goods was deferred, thus shortening by about 20 per cent the time left for their manufacture. But by midsummer or soon after, it had become manifest that the new tariff would be passed too late for foreign competition to have any serious effect upon goods required for the spring of 1914. Because of the time needed for the many and varied manufacturing processes between the raw wool and the finished cloth, and then between the cloth and the finished garment, the clothing manufacturers could delay no longer, or their own establishments would be idle in October and November for want of material on which to work.

Meanwhile lowered prices had been made by the woolen mills, for in anticipation of free wool the prices of fine wools in this country had declined to a parity with foreign prices for similar wools — that is, fine wools were already selling in the United States on a free wool basis. The mills had made their prices when it seemed probable that August would see the new tariff in full effect. In the face of an intensified foreign competition and with a natural desire to keep their organizations intact if possible, many of the mills had made their prices without any regard to profit, content if they could earn expenses and hold their working force together until the results of the new law could be determined by experience.

To sum up the situation — surplus stocks of woolen goods on hand had become so exhausted by the tariff uncertainties of three successive years, 1911, 1912, and 1913, and by serious labor disturbances, that if no unfavorable factor had been evident in the later summer and autumn of 1913, the demand for and sales of woolen goods would have been much in excess of normal to make up for the accumulated deficiency of production in the previous years, and there would have been a manufacturing period shorter than usual to produce the greater than usual amount of goods required for the season's business.

With the spring season absolutely assured to the American mills, there was inevitably an increase in the volume of orders shortly before and after the new tariff became a law. The mills that had named very low prices, at little or no profit to themselves, of course received a large amount of business, and subsequently felt warranted in advancing their prices by the equivalent of from 2 to 5 per cent on late duplicate orders. Thus, an anomalous combination of circumstances has caused quite a number of mills to be busily employed for the months just passed and passing, though, as our figures elsewhere published, of machinery active and idle on December 1, distinctly prove, the season's business is below normal proportions for the woolen industry of the country as a whole.

It is important that these facts of direct personal observation should be recorded at this time. They show the real reasons for the activity of some woolen mills in October, November, and December, 1913, and January, 1914—an activity that has no significance as indicating the actual ultimate effect of the new tariff upon the American woolen industry. Not before the next season—the fall season of 1914—is thoroughly under way will it be possible to measure the results of the new rates upon the prosperity of our woolen mills and their ability to continue to control their present share of the American market.

#### A MOVE FOR HONEST DEALING.

ORGANIZED EFFORT AGAINST BAD PRACTICES IN THE SALE OF MILL SUPPLIES.

On the initiative of the American Association of Woolen and Worsted Manufacturers, as voted at its annual meeting December 2, 1913, in New York, an active organization has been effected for the prosecution and suppression of bribery and other dishonest trade practices in the sale of mill supplies. Coöperating with the American Association in this work are the National Association of Cotton Manufacturers, the American Cotton Manufacturers' Association and the National Association of Wool Manufacturers. The representative of the American Association is Mr. A. M. Patterson, the president of the Waterloo Woolen Manufacturing Company, who has been the chairman of the Association's dyestuff committee. The representative of the National Association of Cotton Manufacturers is Mr. W. A. Mitchell, the agent of the Massachusetts Cotton Mills at Lowell. The representative of the American Cotton Manufacturers' Asso-

ciation is Mr. Cæsar Cone, of the Proximity Manufacturing Company of Greensboro, N.C. President Wood of the National Association of Wool Manufacturers is to appoint a representative of this Association.

The new movement looks to the ending of one of the gravest abuses of the textile trade. As is well known, the dyestuff business in particular is wholly controlled by foreign manufacturers, and the objectionable methods which Mr. Patterson's committee will now endeavor to suppress have been imported from Europe. The fact that all four textile associations are joining in the work insures support from practically the entire woolen and cotton industry, North and South.

Counsel will be employed and all abuses will be vigorously prosecuted. Work will be done in a systematic way, and it will be greatly aided by the evidence already gathered by the dyestuff committee of the American Association of Woolen and Worsted Manufacturers. Mr. Patterson, who has been the moving spirit in this work, is an active and influential member of the National Association as well as of the American Association. The assistance of those dyestuff dealers who believe in honest dealing is assured, and the whole field of the industry will be carefully watched. An organized activity of this kind should soon make things of the past the evil trade practice at which it is aimed.

#### BETRAYED BY THE I. W. W.

HOW THE LAWRENCE STRIKE FUNDS WERE MISUSED BY SELFISH AND INCOMPETENT ADVENTURERS.

If three of the Boston contributors to the Lawrence strike relief fund of 1912 had not brought proceedings in the Suffolk County courts, the gross abuses of trust by the agitator-leaders of the Industrial Workers of the World might have passed undiscovered. But a searching inquiry was had before a Master, who found "That large sums of money contributed to the strike committee, chiefly for relief purposes, were misused and misappropriated." The money contributed by philanthropic or sympathetic persons to feed and shelter particularly women and children who suffered from idleness consequent on the strike was mingled in a common fund by three I. W. W. agents, Bedard, Shaheen, and Trautman, whom the Master holds accountable for

the misapplication of \$18,695.86, "which were not used for the charitable purposes intended."

It appears from the report that everything possible was done to make misappropriations easy. The man Joseph Shaheen, who was appointed treasurer of the fund, had only the feeblest knowledge of the English language, and could not write except enough to sign his name. "We did not sign any checks until they tell us there was money to cover the check in the bank," he said. "That is all we know. We ask if there was money there and they say, 'Yes.'" This same person, who could not write except to sign his name, signed checks in blank, which his fellow-officials filled out in their free judgment. "That was what the order that came to me was," said the naive Shaheen, because "Of course I can't be there every day."

The book of payments was not kept from day to day, so the expert accountant testified, but was written up later from memoranda. One of the accused, Trautman, acknowledged that "Up to February 10, 1912, receipts had been carelessly handled — no expense account being kept, only the receipts for payments were thrown into a drawer at random." The record of cash payments for the first few weeks of the strike could not be found. One check for \$1,169.65 drawn to the order of Bedard was duly made out, but no voucher or record of its application could be located. At first Bedard thought that this money was paid to the Polish committee, but later he was sure that it was given to the Italians, "we spent so much money for the Italians, big bills, too."

Later on Bedard deposited \$2,800 on February 12 and \$8,000 on February 21 in the Lawrence Trust Company in his own name. It transpired in the inquiry that Vincent St. John, national secretary of the Industrial Workers of the World, received \$2,800, Thomas Powers, a textile worker of Providence, \$3,000 more, and Desire A. Stuer, of Lawrence, \$5,000. It was insisted that these moneys were returned to the funds and used for strike purposes, but the Master reported that "I find they were not so returned."

Money doubtless required by hungry women and children was transferred to the agitation fund of the I. W. W. The sum of \$1,498.47 was shown to have been used for sending children from Lawrence to distant cities in the bitter height of an unusually cold winter. This also was to serve the purpose of agitation

pure and simple, for the money would have supported these children and many more at their homes. Trautman, one of the accused, who submitted damaging evidence against the others, swore that of the missing money "a portion was paid to a newspaper man for alleged services, and \$500 to another person," who, however, was not named.

A check, No. 71, for \$3,000, was endorsed by Bedard and one Tepper, a business man of Lawrence, to whom the bank officials state that they paid the money. Bedard stated later that he could not remember endorsing this check at all, and insisted that the Tepper transaction amounted to no more than two or three hundred dollars. The New England Civic Federation has printed the facts of the Lawrence disclosures for circulation among the wage-earners of the country. "Where the money finally filtered," the Federation says, "will remain a mystery for some time longer — at least until Bedard or some beneficiary feels remorse over conduct so faithless, and makes a confession."

Trautman in his own statement declares that from March 24 to May 3 during his absence from Lawrence, between \$3,000 and \$3,500 of the funds contributed for relief were misused in the payment of salaries and high expenses to "scavenger organizers" of the I. W. W., brought from the far West to Massachusetts by Vincent St. John, secretary of the I. W. W. organization. A considerable sum of money appears to have been used to finance the "Industrial Worker," a radical agitating paper of Spokane, and other sums amounting to upwards of \$10,000 "were misused for the propaganda of the I. W. W."

In view of these disclosures it is difficult to see how Ettor and his accomplices can ever again obtain any considerable following of workers in the textile centers of the United States. Among the severest critics of the I. W. W. and their lawless methods have always been the leaders of the regular trades unions affiliated with the American Federation of Labor. The inquiry into the misuse of the Lawrence funds has armed these other genuine labor leaders with a weapon which they can be trusted to use with the utmost effectiveness.

A full summary of the proceedings against the custodians of this Lawrence strike fund can be secured by writing to Mr. John Bruce McPherson, Secretary of the New England Civic Federation, No. 6 Beacon Street, Boston, and inquiring for Bulletin No. 14.

#### BRADFORD'S TRADE FOR 1913.

## AN ACTIVE OPENING FOLLOWED BY A SHARP DECLINE—HOPES OF AMERICA DISAPPOINTED.

In the woolen trade of Great Britain the old year closed in gloom. Early, bright anticipations of a great and profitable trade with the United States had been destroyed by the long delay in Congress in the enactment of the earnestly desired tariff bill of Mr. Simmons and Mr. Underwood. As the "Yorkshire Observer" states in its review: "At the beginning of the year the promised downward revision of the United States tariff opened up prospects stimulating to the imagination, but, owing, first, to the unexpected delay in the passage of the tariff bill, and, secondly, to the postponement until a later date of the changes affecting wool and wool manufactures, all the anticipatory trading turned out wrong." Another complete season was left to American manufacturers.

Even now that the new American tariff has gone into effect. the Yorkshire people regard the American situation as "still somewhat nebulous." "Some increase in the volume of trade with the United States is bound to follow, but when and in what form it will come, and what will be the extent of it, is all a matter of guesswork."

Following is the Yorkshire estimate of the British wool consumption for the twelve months ending with November in the five years past:

WOOL CONSUMPTION ESTIMATE.

For Twelve Months ended November (in 1,000 pounds).

	Import Wool Retained.	Home-grown Retained.	Deduct fo	Net	
			Tops, etc.	Yarn.	Balance.
1909	399,536	79,998	107,667	68,177	303,690
1910	471,832	103,185	110,287	81,780	382,956
1911	477,121	105,343	105,463	78,926	398,075
1912	471,101	84,954	117,148	66,538	372,369
1913	512,648	97,230	125,127	45,706	439,045

As for the wool trade itself Yorkshire agrees that it "must be written down in disappointment." "For topmakers, especially in the merino trade, it has probably been the worst year since 1900, which is memorable for the most spectacular collapse ever recorded on our chart of wool prices." The first months of the year were active and prosperous among the British woolen mills, but a marked decline set in after June, and matters have gone from bad to worse. The year closed with a considerable amount of idle machinery. English wools were marketed too late to take advantage of the favorable conditions in the early part of the year.

Exports of worsted yarns for the eleven months ending with November were 46,055,200 pounds, as compared with 52,330,500 pounds in the corresponding months of 1912, a decrease of 5,275,300 pounds, or 11 per cent. For years Germany has been the best customer of the Bradford spinners, but her imports shrank from 31,862,100 pounds in 1912 to 27,421,600 pounds in 1913, a decrease of nearly 14 per cent. These are the yarn export figures in detail:

YARN EXPORTS.

	Eleven Months ended November 30.							
Woolen, Worsted, and Mohair Yarns.	Quar	itities.	Value.					
	1912.	1913.	1912.	1913.				
	Lb.	Lb.	£	£				
Woolen Yarn	5,777,000	4,496,400	543,293	431,707				
Worsted Yarn:								
Russia	1,933,300	1,339,500	221,168	168,931				
Sweden	1,184,000	1,130,100	128,599	121,876				
Norway	1,350,900	1,403,400	129,531	144,509				
Denmark	1,869,500	1,776,400	180,847	182,405				
Germany	31,862,100	27,421,600	2,822,442	2,572,509				
Netherlands	914,700	1,406,800	83,561	136,096				
Belgium	834,400	1,287,900	70,226	116,077				
France	1,629,200	1,300,000	155,107	133,064				
United States	47,400	58,600	6,494	6,864				
Other Countries	10,705,000	8,930,900	1,087,563	1,013,758				
Total	52,330,500	46,055,200	4,885,538	4,596,089				
Yarn, Alpaca, and Mohair (includ- ing Cashmere Yarns):								
Russia	1,363,300	1,157,500	231,760	242,865				
Germany	10,079,200	11,912,400	1,201,531	1,417,162				
Belgium	465,200	521,200	54,430	62,658				
France	$979{,}100$	925,700	118.428	110,663				
Other Countries	1,260,300	1,327,200	149,729	154,810				
Total	14,147,100	15,844,000	1,755,878	1,988,158				
Yarn, Hair or Wool, unenumerated	8,554,700	7,790,600	364,700	373,938				

## 120 NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

These were the ranges of price in the various worsted, mohair and alpaca yarns:

71	. , ,	
	aretode	

	2/32's Worsted,	2/40's Worsted,	30's Super Luster,	30's Super Demi,	36's Super Demi,
	per Pound.	per Pound.	per Gross.	per Gross.	per Gross.
January February March April May June July August September October November December	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} s. \ d. \\ 2 \ 0 \\ 2 \ 0\frac{1}{2} \\ 2 \ 1 \\ 2 \ 0\frac{1}{2} \\ 2 \ 0\frac{1}{2} \\ 2 \ 0\frac{1}{2} \\ 2 \ 0\frac{1}{2} \\ 1 \ 1\frac{1}{2} \\ 1 \ 10\frac{3}{4} \\ 1 \ 10\frac{1}{2} \end{array}$	s. d. 8 6 8 3 8 6 8 9 9 0 9 0 9 0 9 0 9 0 8 10 <sup>1</sup> / <sub>2</sub> 8 9	s. d. 8 3 8 6 8 6 8 6 8 7 <sup>1</sup> / <sub>2</sub> 8 6 8 6 8 6 8 6 8 6 8 6	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

## Worsteds - (Continued).

	*1/60's Botany, per Gross.	2/48's Botany, per Pound.	2/60's Botany White, per Pound.		* 1/60's Botany, per Gross.	2/48's Botany, per Pound.	2/60's Botany White, per Pound.
Jan Feb March April May June	$egin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	July August Sept Oct Nov Dec	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

<sup>\*</sup> Super 1/60's, 3d. per gross more.

Mohairs and Alpacas.

	2/32's Mohair Plush,	2/32's Mohair Low	2/40's Mohair	1/28's Alpaca,	1/28's Alpaca Low,
	per Pound.	Quality, per Pound.	Medium, per Pound.	per Gross.	per Gross.
January February March April May June July August September October November December	s. d. 2 6 2 7 2 7 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8	$\begin{array}{c} s. & d. \\ 2 & 1 \\ 2 & 2 \\ 2 & 3 \\ 2 & 2 \\ 2 & 3 \\ 2 & 4 \\ 4 \\ 2 \\ 2 & 5 \\ 2 & 4 \\ 4 \\ 2 \\ 2 & 5 \\ 2 & 4 \\ 4 \\ 2 \\ 2 & 2 \\ 2 & 3 \\ 2 \\ 2 & 3 \\ 2 \\ 2 & 2 \\ 2 & 3 \\ 2 \\ 2 & 2 \\ 2 & 3 \\ 2 \\ 2 & 3 \\ 2 \\ 2 & 2 \\ 2 & 3 \\ 2 \\ 2 & 3 \\ 2 \\ 2 & 3 \\ 2 \\ 2 & 4 \\ 4 \\ 2 \\ 2 \\ 2 & 3 \\ 2 \\ 2 & 3 \\ 2 \\ 2 & 4 \\ 4 \\ 2 \\ 2 \\ 2 & 2 \\ 2 & 3 \\ 2 \\ 2 & 4 \\ 4 \\ 2 \\ 2 \\ 2 & 3 \\ 2 \\ 2 \\ 2 & 4 \\ 4 \\ 2 \\ 2 \\ 2 \\ 2 \\ 3 \\ 2 \\ 2 \\ 3 \\ 4 \\ 4 \\ 4 \\ 2 \\ 2 \\ 2 \\ 3 \\ 3 \\ 4 \\ 4 \\ 4 \\ 2 \\ 2 \\ 3 \\ 4 \\ 4 \\ 4 \\ 4 \\ 4 \\ 4 \\ 4 \\ 4 \\ 4$	s. d. 3 3 3 3 3 3 3 3 6 6 3 6 6 3 5 5 5 5 5 5	$ \begin{vmatrix} s. & d. \\ 11 & 6 \\ 11 & 6 \\ 11 & 6 \\ 11 & 6 \\ 11 & 6 \\ 11 & 6 \\ 11 & 6 \\ 11 & 4\frac{1}{2} \\ 11 & 3 \\ 11 & 3 \\ \end{vmatrix} $	s. d. 10 3 10 3 10 3 10 3 10 3 10 3 10 3 10 3

Bradford's trade in piece goods has been severely invaded by the French manufacturers, who have been favored by fashion, "which has turned recently toward fabrics of a light and clinging character, and these are preëminently a French specialty." But Continental competition "has been felt in some of the staples of the district. There is the dress serge trade, for instance; black and navy serges in ordinary finish — the standard Bradford make. It has been thoroughly bad. Probably there is not a worse year on record." But in navy coatings and gaberdines the Bradford year was a relatively good one. The particularly bright spot in the export trade was China, though at the end of the year the outlook, particularly in Shanghai, was very discouraging. But Bradford is now looking westward with eagerness, for a cheerful view is held everywhere regarding the prospects of the United States trade under new conditions.

The clothing industry in England opened with excellent prospects, but like the cloth manufacture this industry, too, went down in the latter half of the year. Winter weather was late in coming, and as a result "overcoats have remained undisturbed on the retailers' shelves. No one, except the very well-to-do people, buys overcoats when Christmas has come and gone. The

only thing to do is to carry forward these heavy stocks of winter garments to next season."

Batley, Dewsbury and the neighboring towns of the heavy woolen district saw the year open with briskness and close with disappointment. It is significant that the Yorkshire authority warns the Dewsbury and other manufacturers that they cannot expect to reap the harvest under the new Simmons-Underwood tariff law which was secured under the Gorman-Wilson law of The west of England woolen trade has had a moderately favorable year, but this was chiefly in domestic trade. "America has furnished high hopes but as yet little realization." A 35 per cent tariff duty combined with free wool is regarded in Yorkshire as quite a difficult hurdle for the Yorkshire manufacturers to mount. There is far less cocksureness of easy sales and great profits in the American market than there was when the Gorman-Wilson tariff law went into effect nineteen years ago, and gave British woolen manufacturers for three years the most prosperous period in their history.

#### WOOL DUTIES IN GREAT BRITAIN.

It is a fact not often remembered nowadays that all through the years when the British wool manufacture was developing its first great strength, raw wool was not free as now, but dutiable. There was then, of course, a very high duty in Great Britain on all foreign wool manufactures. When wool growing began to make headway in Australia there was a demand that British farmers and shepherds should be protected against even the product of a British colony, and duties were maintained against wool from British possessions as well as from foreign countries. These are the rates of duty on wools imported into Great Britain a hundred years or more ago and for some time afterward:

#### RATES OF DUTY CHARGEABLE. Until 5th July, 1803 ..... Free. From 5th July, 1803, to 1st June, 1804..... 5s. 3d. per cwt. . . 1st June, 1804, to 5th April, 1805..... 5s. 10d. 6.6 5th April, 1805, to 10th May, 1806..... 5s. 11-8/20d. " 46 6s. 4-2/30d. 10th May, 1806, to 5th July, 1809 ..... 66 5th July, 1809, to 15th April, 1813 ..... 6s. 8d. 66 . . 15th April, 1813, to 5th July, 1819..... 7s. 11d. 5th July, 1819, to 10th Oct., 1819..... 1d. per lb.

	Wool from British Possessions.	Wool from Foreign Countries.
From 10th Oct., 1819, to 5th Jan., 1823	3, 1d. per lb.	6d. per lb.
" 5th Jan., 1823, to 10th Sept., 182	4, 3d. " "	6d. " "
" 10th Sept., 1824, to 10th Dec., 182	4, 1d. " "	3d. " "
" 10th Dec., 1824, to 5th July, 182	5, 1d. " "	1d. " "
" From 5th July, 1825	Free	$\frac{1}{2}$ d. per lb. on wool not of the value
		of 1s. per lb.;
•		1d. per lb. on
		wool of the
		value of 1s. per
		lb, and upwards.

When the duties on wool were finally repealed by the British government, it was believed that domestic wool growing was so firmly established that no foreign competition need be feared in the wools which could be profitably grown within the boundaries of the United Kingdom. The same confidence was expressed in the ability of British wool manufacturers, after several hundred years of rigid protection, to hold their own against the less highly protected and less developed wool manufactures of the continent of Europe—the woolen industry was still struggling for a mere existence in the United States.

#### Book Review.

#### THE NEW STANDARD DICTIONARY.

A comprehensive dictionary and concise cyclopedia in one is the New Standard — an office reference work of the very first importance. This revision of the Standard Dictionary, first published in 1894, was undertaken in 1909 by a staff of 380 editors and specialists under the direction of Isaac K. Funk, D.D., LL.D., editor-in-chief. The result is a work of over 3,000 pages, recording and defining more than 450,000 terms, or 50,000 more than are contained in any other dictionary in the language.

A salient feature of the Standard has always been its practical character—its adaptability to actual general use. This merit of the earlier has been markedly strengthened in the later work, which is throughout a model of clear and logical arrangement. The distinction of synonyms is another conspicuous and useful quality of the work, and the editors have rendered a notable service in the earnest effort which they have everywhere made to point out to their readers, and enable them to avoid, current faults of diction. The great work is in all points a fine example of conscientious scholarship.

Thousands of vital facts in history, geography, biography and the other principal arts are clearly and tersely stated. Emphasis is placed on the live words of to-day, including the essential phrases of modern technical terminology. One alphabetical order is followed throughout, including all proper names, only foreign phrases being placed in a separate department — so that the inquirer has to look in but one place for the term needed — a valuable economy of time and labor.

There are more than 7,000 pictorial illustrations. The mechanical appearance of the great work is of the very best, in paper, type, and printing. It is a most valuable addition to the working office library of manufacturers, bankers or merchants. There are a one-volume and also a two-volume edition. The publishers are the Funk & Wagnalls Company, 354–360 Fourth Avenue, New York, N.Y.

### QUARTERLY REPORT OF THE BOSTON WOOL MARKET FOR JULY, AUGUST, AND SEPTEMBER, 1913.

Domestic Wools. (George W. Benedict.)

		1913.		1912.
	July.	August.	September.	September
OHIO, PENNSYLVANIA, AND WEST VIROINIA. (WASHED.)				
	26 @ 27	26 @ 27	26 @ 27	21 @ 20
X	25 g 26	25 g 26	25 @ 26	31 @ 32 29 @ 30
½ Blood	30 g 31 30 g 31	30 <b>@</b> 31 30 <b>@</b> 31	30 <u>a</u> 31 30 <u>a</u> 31	$37 \tilde{a} 38$
3 "	30 @ 31	30 @ 31	30 <u>a</u> 31 30 <u>a</u> 31	37 <u>a</u> 38 37 <u>a</u> 38
Fine Delaine	27 <u>a</u> 28	27 @ 28	27 g 28	34 g 35
(UNWASHED.) Fine	20 @ 21	20 3 21	20 @ 21	23 @ 24
½ Blood	23 a 24	23 a 24	23 g 24	$29 \hat{g} 30$
3 " · · · · · · · · · · · · · · · · · ·	23 d 24 23 d 24	23 <u>a</u> 24 23 <u>a</u> 24	23 <u>@</u> 24 23 <u>@</u> 24	30 <u>ĝ</u> 31 30 <u>ĝ</u> 31
Fine Delaine	22 <u>a</u> 23	22 @ 23	22 g 23	28 @ 29
IICHIGAN, WISCONSIN, NEW YORK, ETC.				
(WASHED.)				
Fine	29 @ 30	20 = 20		00 0 0
‡ Blood	29 a 30	29 @ 30 29 @ 30	29 <u>@</u> 30 29 <u>@</u> 30	36 <u>6</u> 37 36 <u>6</u> 37
1 "	29 @ 30	29 ĝ 30	29 <u>š</u> 30	$36 \ \bar{a} \ 37$
Fine Delaine	26 g 27	26 à 27	26 <u>ĝ</u> 27	33 <u>a</u> 34
Fine	19 @ 20	19 @ 20	19 @ 20	$22 \ \hat{g} \ 23$
½ Blood	22 @ 23 22 @ 23	22 g 23 22 g 23	22 <b>3</b> 23 22 <b>3</b> 23	28 <u>g</u> 29 29 <u>g</u> 30
8 "	$22 \ \bar{g} \ 23$	22 <u>a</u> 23	22 g 23	29 <u>a</u> 30
Fine Delaine	21 @ 22	21 @ 22	21 <u>a</u> 22	$26 \stackrel{\smile}{\hat{a}} 27$
ENTUCKY AND INDIANA. (UNWASHED.)				
Blood	24 @ 25	24 @ 25	24 @ 25	31 g 32
Braid	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	24 @ 25 23 @ 24	24 @ 25 23 @ 24	31 <u>ā</u> 32 26 <u>ā</u> 27
IISSOURI, IOWA, AND ILLINOIS.	20 9 24	20 8 24	20 8 24	20 8 21
(UNWASHED.)	23 @ 24	23 <u>å</u> 24	99 @ 99	20 = 00
3 Blood	23 @ 24	23 @ 24	22 <b>@</b> 23 22 <b>@</b> 23	29 <u>@</u> 30 29 <u>@</u> 30
Braid	22 @ 23	22 @ 23	22 <b>ā</b> 23	26 g 27
EXAS. (SCOURED BASIS.)				
12 months, fine, and fine medium	52 @ 53	52 g 53	52 <u>á</u> 53	$60 \ \bar{g} \ 62$
6 to 8 months, fine	46 <u>a</u> 47 47 <u>a</u> 48	46 <u>a</u> 47 47 <u>a</u> 48	46 @ 47 47 @ 48	53 <u>a</u> 55 53 <u>a</u> 55
6 to 8 months, medium	$41 \ \bar{a} \ 42$	41 @ 42	41 6 42	$47 \ \hat{a} \ 50$
Fall, fine and fine medium	43 <u>a</u> 44 38 <u>a</u> 40	43 & 44	43 g 44	48 & 50
" medium	35 g 40	38 <u>ā</u> 40	38 â 40	43 ĝ 45
(SCOURED BASIS.)	10 5 50	10 - 10	40 - 11	
Free, 12 months	48 @ 50 44 @ 45	48 <u>a</u> 50 44 <u>a</u> 45	48 @ 49 44 @ 45	53 <u>a</u> 55 47 <del>a</del> 48
Fall, free	42 @ 43	42 ä 43	42 @ 43	45 @ 46
" defective	36 ĝ 38	36 @ 38	36 <u>3</u> 38	$39 \ \hat{a} \ 41$
ming, Utah, Idaho, Oregon, etc.				
(SCOURED BASIS.)	59 9 55	2.2 0 0.3	50 = 11	27 : 20
Staple, fine and fine medium medium	53 @ 55 50 @ 51	53 @ 55 50 @ <b>51</b>	53 <b>3</b> 54 48 <b>3</b> 49	67 <u>a</u> 68 62 <u>a</u> 64
Clothing, fine and fine medium	48 @ 50	48 3 50	48 @ 49	$60 \ \bar{g} \ 62$
" medium	45 @ 46	45 @ 46	43 @ 44	57 g 58
(SCOURED BASIS.)				
No. 1 · · · · · · · · · · · · · · · · · ·	48 g 49 43 g 44	48 @ 49	47 @ 48 42 @ 43	58 <u>@</u> 60
No. 2	38 & 39	43 <u>ā</u> 44 38 <u>ā</u> 39	42 <b>ā</b> 43 37 <b>ā</b> 38	52 @ 54 45 @ 47
No. 4	35 @ 37	35 @ 37	34 @ 35	43 <u>@</u> 45
EORGIA AND SOUTHERN. Unwashed	21 @ 22	21 @ 22	21 @ 22	27 @ 29
	'''	5	to	21 B 49

#### Domestic Wool.

Boston, September 30, 1913.

The quarter under review (July, August and September) has been devoid of special interest with values about steady.

The light weight season was naturally late in developing as buyers of goods held off as long as possible to see the trend of tariff legislation. When it became generally known, however, that there would be no change in the wool and woolen schedule until after December 1 and January 1 respectively, a fair amount of business was booked by manufacturers for the light weight season. Inasmuch as stocks of wool in manufacturers' hands were extremely light there was necessarily a fair buying movement in wool through the summer months to cover immediate wants, which demand resulted in keeping values about on an even keel.

The call for low wools such as common and braid was very keen and the supply of these grades of wool was soon exhausted.

All grades of medium fleece wools are in light supply.

It is generally considered that the finer grades of domestic wools are below the same relative grades abroad, hence values in these grades are not likely to recede if our mills run. On 4 blood and below grades values will have to decline further before December 1 in order to compete with foreign importations.

GEORGE W. BENEDICT.

Pulled Wools.	(Scoured basis.)	(W. A. Blanchard.)
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	1913.			1912.
	July.	August.	Sept.	Sept.
Extra, and Fine A	50 <u>@</u> 55	49 @ 54	48 <u>@</u> 54	48 @ 55
A Super	45 @ 48 40 @ 43	45 <u>@</u> 48 39 <u>@</u> 41	44 @ 47 38 @ 40	46 @ 48 42 @ 45
C Super	33 <u>a</u> 36 47 <u>a</u> 50	32 <u>@</u> 35 45 <u>@</u> 47	32 @ 35 43 @ 45	33 <u>@</u> 36 48 <u>@</u> 52
Medium Combing	43 <u>â</u> 45 39 <u>ā</u> 41	41 <u>@</u> 43 37 <u>@</u> 39	40 @ 42 36 @ 38	44 @ 46 39 @ 42
California Extra	48 @ 51	47 à 50	47 @ 50	48 @ 52

#### Remarks.

As shown by the quotations the course of the market has been steadily downwards. The finer grades, by reason of short supply, declined less than medium and coarse wools. The production during this quarter is principally lambs wool, the B grade predominating, and an accumulation in the hands of New York pullers resulted in a sale in September of 2,500 bags at a concession of two to three cents a pound from the holding prices. A similar transaction in Chicago A Supers occurred earlier in the quarter with a corresponding break in values. Purchasing on the part of manufacturers was done on the same hand-to-mouth basis which has prevailed throughout the year.

W. A. BLANCHARD.

Boston. September 30, 1913.

FOREIGN WOOLS. (MAUGER & AVERY.)

				15	)13.			15	912.
		J	uly.	Au	gust.	s	ept.	s	ept.
Australian Combing:		_							
Choice		42	@ 45	42	@ 44	41	@ 43	41	@ 44
Good		40	ā 41	40	a 41	40	@ 41	40	@ 41
Average	.	37	@ 38	37	$\hat{a}$ 38	37	@ 38	36	ā 38
Australian Clothing:									
Choice		41	ā 44	41	@ 44	41	@ 44	42	a 4-
Good	.	40	ā 42	40	@ 42	40	@ 42	40	@ 41
Average	.	38	@ 39	38	@ 39	38	$\hat{a}$ 39	38	@ 39
Sydney and Queensland:									
Good Clothing		42	@ 44	42	@ 44	42	@ 44	42	@ 43
Good Combing		40	$\hat{a}$ 43	40	ā 43	40	@ 43	40	@ 45
Australian Crossbred:									
Choice		40	@ 43	40	<b>a</b> 43	40	@ 43	40	@ 43
Average		37	g 39	37	<b>a</b> 39	37	ā 39	35	@ 3
Australian Lambs:									
Choice		42	@ 45	42	@ 45	42	@ 45	42	@ 4
Good		39	â 40	39	@ 40	39	@ 40	39	@ 40
Good Defective		37	ā 39	37	<b>@</b> 39	37	â 39	37	@ 38
Cape of Good Hope:									
Choice		34	$\bar{a}$ 36	34	@ 36	34	@ 36	34	@ 3
Average		30	@ 33	30	@ 33	30	@ 33	30	@ 3
Montevideo:									
Choice		42	@ 43	40	@ 41	40	@ 41	35	@ 37
Average		41	$\hat{g}$ 43	38	@ 40	38	@ 40	32	â 3,
Crossbred, Choice	.	37	@ 40	36	g 38	36	@ 38	35	@ 38
English Wools:									
Sussex Fleece		42	@ 43	42	@ <b>4</b> 3	42	@ 43	41	$\widehat{a}$ 4:
Shropshire Hogs		41	@ 43	41	a 43	41	@ 43	40	@ 4
Yorkshire Hogs		39	@ 40	39	@ 40	39	@ 40	36	@ 3
Irish Selected Fleece		39	$\hat{a}$ 41	39	@ 41	39	@ 41	38	@ 39
Carpet Wools:									
Scotch Highland, White		25	$\hat{a}$ 26	25	@ 26	25	£ 26	23	@ 23
East India, 1st White Joria		33	â 35	33	<b>3</b> 35	33	@ 35	31	$\hat{a}$ 33
East India, White Kandahar		29	ā 30	29	@ 30	29	@ 30	27	@ 28
Donskoi, Washed, White		34	g 35	34	@ 35	34	@ 35	35	@ 36
Aleppo, White		26	$\hat{a}$ 28	26	@ 28	26	@ 28	35	@ 36
China Ball, White		$^{27}$	$\hat{a}$ 28	27	@ 28	27	@ 28	25	@ 28
" No. 1, Open		$^{24}$	@ 27	24	@ 27	24	@ 27	24	@ 25
" No. 2, Open		19	a 20	19	@ 20	19	@ 20	18	@ 19

### FOREIGN WOOLS.

The continued high range of values for foreign wools abroad has prevented much buying for this market, even in anticipation of free wool.

The chief event of interest in the foreign wool situation was the sale of a large line of South American crossbreds to one of our leading New England mills, practically clearing the market of this class of stock.

Other purchases have been confined to specialties.

Mauger & Avery.

Boston, November 29, 1913.

# IMPORTS OF WOOL AND MANUFACTURES OF WOOL.

Entered for Consumption, Years ending June 30, 1912 and 1913. Quantities, Values, Rales of Duty, and Accrumy Duties.

Under the Act of 1909.

Compiled from Reports of Commerce and Navigation, Bureau of Statistics, Department of Commerce.

;; 	Average.	Value per unit of quantity. Ad valorem rate of duty.	Dolls. Pr.ct. .168 89.48 .246 50.86	.104 210.70 .146 73.92	215 51.11	.186 59.22
e e		Duties.		64,840,00 6,771.00 14,264.80 104 2,085.20 931.00 688.15 ,446	6,814,974.57	14,890.04
1913.		Foreign values.	1,554,022,00 Dollars. Dollars. 60,405,631,13,13,13,000,0,644,619,42	6,771.00	13,332,851.00	25,145 00
		Quantities.	1,554,022,00 60,405,631.13	64,840.00	62,026,578.33 13,332,851.00 6,814,974.57	135,364.00
		Duties.	Pollars. 70,019.21 7,550,971.89	58 80 19.36 41.58	7,621,110.84	7,789.32
1912.		Foreign values,	Tou, 192.06 124, 642.00 70, 198.21 (8, 645, 198.93 15, 185, 783.75 7, 550, 971.89	51.00 27.00 41.50	69,345,884.99 15,310,555.25	16,717.00
		Quantities.	700,192,96 68,645,198.93	280,00 88,00 126,00	69,345,884.99	70,812.00
		Rates of duty.	10 cents per pound, 11 cents per pound,	21 cents per pound, 22 cents per pound, 33 cents per pound,		11 cents per pound.
		ARTICLES.	Wools, hair of the camel, goat, alpaca, or other like animals: Class 1—Merino, mestizo, metz, or metis wools, or other wools of merino blood, innediate or remote, down clothing wools, etc., and all wools not hereinafter included in elasses two and three—Unwashed wool—Un the skin (pounds).  Not on the skin (pounds)	Washed wool  Unit he skin (pounds)  Not on the skin (pounds)  Scoured wool (pounds)	Total, Class 1	Class 2 — Leicester, Cotswold, Lincolnshire, down combing wools, Canada long wools, or other like combing wools of English blood, and usually known by the terms berein used, and also hair of the camel, Angora quant also hair of the camel, Angora quant also hair of the camel, Angora quant, alpasa and other like animals — Wool, washed and unwashed — On the skin (pounds)

48.24 90.97 47.65	45.98	37.56	47.05	29.10 35.50 107.99	34.64	36.20 35.91 126.00	41.86	37.67	44.67		65,17	65.17
249. 4 264. 9 755.	.261	.319	.255 4	2.103 2.113 10 110	.115 3	.166 .195 .21 .167	.167	140	.176		4.33 6	4.33
1,373,702.60 3,624.24 50.04	100,569.84	143,406.54	1,636,243.30	96,720,72 2,227,610.14 371,959.08	2,506.68	2,112,837.43 1.26	257,107.76	5,068,764.07	3,519,981.94		43.01	43.01
2,847,701.00 3,984.00 105.00	218,717.00	381,822.00	3,477,474.00	322,333.00 6,274,411.00 344,442.00	7,237.00	5,882,940.00 1.00	614,272.00	13,455,694.00	30,266,019.00		00.99	99*99
11,447,521.66, 15,101.00 139.00	838,082.00	1,195,054.50	13,631,262.16	3,224,024.00 55,690,253.50 3,099, <b>6</b> 59.00	62,667.00	30,183,392.00 6.00	3,672,968.00	95,933,319.50 13,455,694.00	171,591,159.99		15.25	15.25
2,314,039.00 1,054,511.25	6,709.32	243,591.00	2,977,489.00 1,312,615.29	96,180.07	5,723.40	2,105,926.03	258,547.95	5,520,508.12	14,454,234.25	533.98	263.56	497.44
2,314,039.00	14,391.00	632,330.00	2,977,489.00	333,847.00 8,401,691.00	15,519.00	5,508,034.00	594,273,00	14,853,364.00	33,141,408.25	167.00	368.60	535.60
8,787,594.00	55,911.00	2,029,925.00	10,944,282.00	3,206,003.00	143,085.00	30,084,657.57 5,503,034.00 2,105,996.03	3,693,542.15	113,480,554.62 14,853,364.00 5,520,508.12	193,770,721.61 33,141,408.25 14,454,234.25 171,591,159.99 30,266,019.00 13,519,981.94	456.00	138.25	594.25
12 cents per pound, 24 cents per pound, 36 cents per pound,	12 cents per pound,	12 cents per pound,		3 cents per pound, 4 cents per pound, 12 cents per pound,	4 cents per pound,	6 cents per pound, 7 cents per pound, 21 cents per pound,	7 cents per pound,			33 cents per pound and 50 per cent.	and 55 per cent.	:
Not on the skin (pounds) Sorted (pounds)	Washed and unwashed (pounds) Hair Angora goat, alpaca, and	Washed and unwashed (pounds) 12 cents per pound,	Total, Class 2	Class 3 — Donskoi, native South American, Cordova, Valparaise, native Smyrna, Rus- stan camel's hair, etc. Valued 12 cents or less per pound — Wool, washed and unwashed — On the skin (pounds)	unwashed (pounds)	Wool, washed and unwashed — On the skin (pounds)	unwashed (pounds)	Total, Class 3	Total wools, etc., unmanufactured	Manufactures composed wholly or in part of wool, worsted, the hair of the camel, goat, alface, or other animals— Wool and hair advanced in any manner, or hy any process of manufacture, beyond the washed and scoured condition, not expecially provided for— Valued at not more than 40 cents per pound (pounds)	connect role and support to the supp	Total advanced

Imports of Wool and Manufactures of Wool, entered for Consumption, Years ending June 30, 1912 and 1913. Quantities, Values, Rates of Duty, and Accruing Duties. - Continued.

Waste — 10 c  Nuigo (pounds)	Hoents per pound 20 cents per pound 30 cents per pound 20 cents per pound 20 cents per pound 31 cents per pound 32 cents per pound 33 cents per pound 34 cents per pound 35 cents per pound 36 cents per cent.	2532,014,00 85,933,00 44,510,00 362,307,00	values.  Dollars. 124,520,007 26,303,007 17,184,007 165,007,007	Duties,  Dollars,  46,412,80  N,588,30 ,, 8,562,00  63,868,10  156,56	Quantities. 112.00 185,240.00 110,252.00 33.00 51,757.00 345,394.00	Foreign Values, Dollars, 29,324,00 11,00 24,531,00 102,848,00 287,00	Dutics.  Dollars. 36,648.00 11,025.20 9.30 10,351.40 58,045.70	56   55   14   14   15   15   15   15   15	1
Yarns, made wholly or in part of wool —  Valued not more than 30 cents per part of wool —  pound (pounds)	27½ cents per pound and 35 per cent 38½ cents per pound and 40 per cent.	323.50	83.90	118,36	4,542.00	1,260.60	1,690.27	.278 134.08 .582 106.18	
Total yarns		61,300.23	59,470.16	47,245.11	199,738.15	114,810.20	122,260.75	.575 106.49	

Blankets -									
Valued not more than 40 cents per pound (pounds)	22 cents per pound and 30 per cent	1,821.00	603.90	581.80	2,518.86	779.10	787.88		.309 101.13
Valued more than 40 and not more than 50 cents per pound (pounds)	33 cents per pound and 35 per cent	1,131.60	539.05	562.11	1,914.24	879.55	939.57	.459	.459 106.82
Valued at more than 50 cents per pound (pounds)	33 cents per pound and 40 per cent	39,421.27	45,677.88	31,280,49	38,253,39	46,916.00	31,390.15	1.23	66.91
Ditto (duty remitted)		00.5	32.00				:	•	
More than 3 yards in length—Valued not more than 40 cents per pound (pounds)	33 cents per pound and 50 per cent	244.00	53,00	107.03	645.50	170.00			263 175.31
Valued more than 40 and not more than 70 cents per pound (pounds)	44 cents per pound and 50 per cent	2,495.75	1,482.00	1,839.13	6,802.87	4,108.00	5,047.26	÷0.9	.604 122.86
Valued more than 70 cents per pound (pounds)	44 cents per pound and 55 per cent	5,273.46	3,618.35	3,430.42	26,192.41	21,870.15	23,553,25	.835	.835 107.70
Total blankets		48,409.08	32,006.18	37,800,98	76,327.27	74,722.80	62,016.13	979.	82.99
Carpets and carpeting— Abbuseon, Axminster, moquette, and chebille carpets (equare yards)	60 cts. pr. sq. yd. and 40 per cent.	27,023.14	65,864.00	42,559.49	24,799.63	67,625.00	41,929.78	2.73	62.00
Ditto (duty remitted) Panama Act.		:	:		1,215.00	3,365.00		:- :-	:
Brussels carpets (square yards)	44 cts. pr. sq. yd. and 40 per cent.	1,532.50	2,290.00	1,590.30	2,643.40	3,783.00	2,676.30 1.43	1.43	70.75
Carpers woven whose for rooms, and Oriental, Berlin, Aubusson, Axminster, and other similar rugs (square yards)	90 ets. pr. sq. yd. and 40 per cent.	760,295.04	760,295.04 3,781,058.58 2,196,689.18	2,196,689.18	823,284.79	4,048,320.55	05.284.79 4,045,320.55 2,369,284.40	4.86	585,53
Ditto (duty remitted) Panama Act.		:			110,00	355.00	355.00	8.5	:
Druggets and bockings, printed, colored, or otherwise (square yards)	22 cents per sq. yd. and 40 per cent.	$18,812.00_1$	14,694.00	10,016.24	20,916.00	17,010.00	11,405.52	.813	67.05
Felt carpeting (square yards)	50 per cent	5.20	8.00	4.00	3.00	10.00	5.00	3.33	50.00

Quantities, Values, Imports of Wool and Manufactures of Wool, entered for Consumption, Years ending June 30, 1912 and 1913. Rates of Duty, and Accruing Duties. - Continued.

			1912.			1913.	*		
ARTICLES.	Rates of duty.	Quantities.	Foreign values.	Duties.	Quantities.	Foreign values.	Duties.	Value per 10 tinu 10 t	Ad valorem # fall of the of th
Wools, hair of the camel, etc. — Continued. Manufactures composed wholly or in part of wool, worsted, etc. — Continued. Cappels and expeting. Saxony, Wilton, and Tournay vel.	60 cts. per sq. yd, and 40 per cent.	11,414,11	Dollars. 23,307,00	Dollars. 16,171.30	11,069.38	<i>Dollars.</i> 22 791.00	Dollars. Dolls. Pr. ct. 15,758.03 2.06 69.14	Dolls. 2.06	Pr. cd. 69.14
Tapestry Brussels, printed on the warp or otherwise (square yards)	28 cents persq. yd. and 40 per cent	390.00	225.00	199.20	214.75	99.00	96.13		.419 106.81
Treble ingrain, three-ply, and all chain Venedian carpets (square yards)	22 ets. per sq. yd. and 40 per cent.	8,510.36	8,942.00	5,449.52	7,869.00	7,521.00	4,739.58	956.	63.02
Velvet and tapestry velvet carpets, printed on the warp or otherwise (square yards)	40 cts. per sq. yd. and 40 per cent.	37,664.78	68.338.00	42,401.11	32,627.06	08;058.00	40,274.02	2.09	59.18
Wool, Dutch, and two-ply ingrain 18 cts, per sq. yd. carpets (square yards)	18 cts. per sq. yd. and 40 per cent.	366.00	430.00	237.88	449.00	474.00	270.42	270.42 1.06	57.05
Carpets and carpeting of wool, and flax or cotton, not especially provided for (square yards)	50 per cent	19,702.76	32,834.42	16,417.21	15,768.44	24,579.26	12,289.63	1.56	50.00
Total carpets and carpeting		885,715.95	885,715.95 3,997,991.00	2,331,735.43	940,969.45	4,263,981.81	2,498,728.81	1.53	58.60

Cloths, woolen and worsted Valued not more than 40 cents per pound (pounds)	33 cents per pound and 50 per cent.	10,123.38	3,524.30	5,102.89	4,265.95	1,417.50	2,116.53	.332	.332 149.31
Valued more than 40 cents and not more than 70 cents per pound (pounds)	44 cents per pound and 50 per cent.	282,239.56	166,659.47	207,515.18	303,943.38	186,975.69	227,222.94	.615	.615 121,52
Valued above 70 cents per pound (pounds)	44 cents per pound and 55 per cent.	3,921,317.61	3,921,317.61 4,513,584.12	4,207,851.06	3,725,252.20	3,725,252.20 4,454,296.21	4,088,973.99	1.20	91.80
Total cloths, etc. (pounds)		4,213,680.55	4,213,680.55 4,683,767.89 4,420,469.13	4,420,469.13	4,033,461.53	4,642,689.40	4,033,461.53 4,642,689,40 4,318,313,46 1.15	1.15	93.01
Dress goods, women's and children's, coat limings, Italian cloths, and goods of similar description—  The warp consisting wholly of cotton or other vegetable manerials, with the remainder of the fabric composed wholly or in part of wool—  Weighing 4 ounces or less per aguare yand and to a cxceeding 15 cents per square yard and not above 70 cents 7 cents per pound (square yard and or above 70 cents 7 cents per pound (square yards) aud 50 per cent.	7 cents per sq. yd. and 50 per cent.	2,902,248.11	402,206.00	404,200.37	2,720,746.80	375,474.00	378,189.27	138	.138 100.72
Above 70 cents per pound (square 77 cents per sq. yd. yards) and 55 per cent.	7 cents per sq. yd. and 55 per cent	706,653.67	102,228.00	105,691.16	900,004.00	131,787.00	135,483.13	.145	.145 102.80
Valued above 15 cents per square sard and not above 70 cents per 8 cents per sq. yd. pound (square yards)	S cents per sq. yd. and 50 per cent.	202,719.00	33,151.00	32,793.02	133,559.50	21,987.00	21,678.26	.165	98.59
Above 70 cents per pound (square yards)	S cents per sq. yd. and 55 per cent	4,141,606.23	827,894.80	786,670.62	3,311,275.45	661,553,51	628,756,49	200	95.04
Weighing over 4 onnees per square yard — Valued not more than 40 cents per pound (pounds)	33 cents per pound and 50 per cent less 5 per cent.				80	00 090	10 00 00 00 00	3098	62 SF L 868
Valued more than 40 and not more than 70 cents per pound (pounds),	<b>→</b>	31,026.45		22,118,98	27,925.50	16,647,00	19,580,19	969.	.596 117.62

134 NATIONAL ASSOCIATION OF WOOL MANUFACTURERS. 96.03 00.66 95.54 Ad valorem rate of duty. 240 100.90 308 157.00 .159 119.23 .603 123.01 Dollars. Polls. Pr.ct. 9.00 Imports of Hool and Manufactures of Wool, entered for Consumption, Years ending June 30, 1912 and 1913. Quantities, Values, Average. 6. 6. Value per unit of quantity, F::1 .0. 65,470.49 557,33 118,325,81 2,705.30 787,812,58 104,415.62 739,577,82 2,984,600.15 Duties. 123,854.79 1913. Dollars. 168,695.00 355.00 770,172.75 3,014,846.85 2,269.00 00.688,48 780,761,59 Foreign values. 100,029.40 718,142.69 184,993.20 14,280,00 3,258,124.17 1,151.00 140,848.00 . . . . . . Quantities. Rates of Duty, and Accruing Duties. — Continued. Dollars. 248,227.90 97,157,18 3,356,882.62 109,187.85 4,406.35 929,312.85 135,25 726,108.94 Duties. Dollars. 255,604.40 3,366,964.50 115,481.91 736,099,93 89.00 19,378.40 3,950.25 907,099.72 Foreign values. 1913. 275.00 90,679.50 3,912,799.90 730,122.77 274,341.27 22,101.94 30,609.04 Quantities. and 55 per cent less 5 per cent. and 50 per cent. . 33 cents per pound 44 eeuts per pound eents per sq. yd. 11 cents per sq. yd. and 55 per cent. 44 c. p. lb. & 55 p.e. 44 c. p. lb. & 60 p.e. and 50 per cent. 44 cents per pound and 50 per cent. Rates of duty. Valued not more than 40 cents per cents per pound (pounds) . . . . . (square yards) Composed wholly or in part of wool— Valued not above 70 cents per pound Valued above 70 cents per pound than 70 cents per pound (pounds) Manufactures composed wholly or in part Weighing 4 ounces or less per square Valued more than 70 cents per pound Dress goods, women's and children's, Weighing over 4 ounces per square Felts not woven pounds: . . . . . . Wools, hair of the camel, etc. - Continued. . . . . . . of wool, worsted, etc. - Continued. Valued more than 70 pound (bounds) Total dress goods . . ARTICLES. (square yards) ete. — Cont. vard –

1

Flannels for underwear — Valued at not more than 40 cts, per   22 cents per pound pound (pounds) and 30 per cent.	22 cents per pound and 30 per cent.	10.00	3.90	3.37	13.00	3.20	3.84	.246	.246 120.00
Valued at more than 40 and not more than 50 cents per pound (pounds)	33 cents per pound and 35 per cent.	325,00	155.00	161.50	•	:		:	:
Valued above 70 cents per pound (square yards)	11 cents per sq. yd. and 55 per cent.	17,754.74	9,379,00	7,111.46	38,021.50	17,407.50	13,756.49	.458	79.03
Weighing over 4 ounces per square yard.  yard more than 50 and not more than 70 cents per pound (pounds)	44 cents per pound and 50 per cent.	384.00	282.00	309.96	00.869	642.00	760.12	.643	.643 118.40
Valued more than focents per pound (pounds)	44 cents per pound and 55 per cent.	107,175.50	119,054.40	112,637.14	78,521.13	79,135,25	78,073.69	1.01	98.66
Total flannels, etc.			128,874.30	120,223.43		97,187.95	92,594.14	:	95.28
Knit fabrics (not wearing apparel) — Valued at not more than 40 cents per pound (pounds)	33 cents per pound and 50 per cent.	11.50	4.00	5.79				:	:
Valued more than 40 and not more than 70 cents per pound (pounds),	44 cents per pound and 50 per cent.	1,007.00	658.00	172.08	370.00	228.00	276.80	919.	.616 121.40
Valued above 70 cents per pound   14 cents per pound (pounds)	44 cents per pound and 55 per cent.	7,780.00	8,428.00	8,058.60	8,091.52	9,004.78	8,513.00	1.11	94,54
Total kint fabrica (not wearing, apparel)		8,798.50	00.060,6	8,836.47	8,461.52	9,232.78	8,789.80	90.	95.20
Plushes and other pile fabrics — Valued more than 40 and not more than 70 cents per pound (pounds)	44 cents per pound and 50 per cent.				948.00	99.669	716.62		.632 119.64
Valued morethan 70 cents per pound (pounds)	44 cents per pound and 55 per cent.	7,480.33	8,990.00	8,235.84	11,652.80	13,559.00	12,584.68	1.16	92.81
Total plushes, etc.		7,480.33	8,990.00	8,235.84	12,600.80	14,158.00	13,301.30	1.12	93.95
									-

			9,01						
							:		
ARTICLES.	Rates of duty.	Quantities.	Foreign values.	Duties.	Quantities.	Foreign values.	Duties.	Value per unit of quantity. Advalorem Advalorem frate of trate of duty.	rate of court.
d.  part eady- aring nufac- , not	14 cents per pound and 60 per cent.	87,675.57	Dollars. 171,923.68	Pol/ars. 141,731.52	64,379,89	Dollars. 135,420.85	Dollars. Dolls. Pr. et., 119,579,64-2.10   80.92	Dolls.	Pr.ct 80.93
	44 cents per pound and 60 per cent.	293,478.30	391,923.45	364,284,75	364,306,40	487,284.72	452,665.70 1.34	1.34	92,90
	44 cents per pound and 60 per cent.	16,939.39	18,034.75	18,274.27	17,106.01	18,094.04	18,383.08 1.06	1.06	101.60
articles of wearing apparel, made up or manufactured wholly or in part (pounds)	44 cents per pound and 60 per cent	576,040.46	576,040,46 1,608,155.72 1,213,351.08	1,213,351.08	476,009.29	476,009.29 1,481,068.44 1,098,085.22	1,098,085.22	3.11	74.14
Ditto Phillipine Islands) Ditto (from Phillipine Islands)	Duty remitted . Free	35.00		184.00	26.50	360.00	360.00	13.58	
(pounds)	and 60 per cent less 20 per cent.	21.00	80.00	45.80	17.25	38.00	24.31	2.20	63.98
Total wearing apparel (pounds)			974,189.72 2,190,301.60 1,742,686,42	1,742,686.42	921,841.09	921,841.09 2,122,270.05 1,678,737.95 2.30	1,678,737.95	2.30	79.10

Total v

83.18	.95	.95	:	83.67		:	81.78	56.99
	.363 140.95	.564 127.95	.640		 ep	= -		
				1.5	1.5	:		::
75,492.68 2.16	6,159.59	94,766.69	1,050.00	221,454.27 1.53	2,319.00	•	,293,904.07	813,886.01
09	8	- 99	90	18	. 00	•	4.00 2.81 12	4.00
90,761.50	4,370.00	27,171.50	1,050.	264,689.18	2,319.		4. 5,031,312	4. 5,297,331.
42,071.49	12,044.18	48,138.50	1,641.00	172,443,49	1,528.75		12,599,246.01	80.26
59,448.02	5,048.63	37,627.38	:	249,262.41	:	33.09	12,599,246.01	27,053,480.26
72,438.86	3,402.00	28,854.00	:	296,294.91		48.00	15,182,693.91	48,324,102.16
31,969.20	10,144.33	52,725,10	:	196,136.15		34.00		
50 cents per pound and 60 per cent	33 cents per pound and 50 per cent, .	44 cents per pound and 50 per cent.		44 cts. per pound and 55 per cent.		44 cents per pound and 55 per cent less 20 per cent.	Pree Dutiable 15,182,693.91 [2,599,246.01] 15,031,312.81 [12,293,904.07]	Free
Webbings, gorings, suspenders, bandings, beltings, brindis, edgrings, brings, cords, and other trimmings, etc. (pounds)	All other manufactures wholly or in part of wool— Valued not more than 40 cents per 33 cents per pound pound (pounds) and 50 per cent.	Valued more than 40 cents perpound and not more than 70 44 cents per pound cents per pound (pounds) and 50 per cent.	Duty remitted. Panama Act	Valued more than 70 cents per 44 cts. per pound pound (pounds)	Duty remitted. Panama Act	Ditto (reciprocity treaty with Cuba) 44 cents per pound and 55 per cent less 20 per cent.	Total manufactures of wool	Total wool and manufactures of

## BULLETIN

OF THE

# National Association of Mool Manufacturers

### A QUARTERLY MAGAZINE

DEVOTED TO THE INTERESTS OF THE NATIONAL WOOL INDUSTRY.

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[No. II.

WORSTED MILL CONDITIONS IN ENGLAND.

OBSERVATIONS ON A RECENT TOUR OF AN AMERICAN MANUFACTURER.

By WILLIAM D. HARTSHORNE.

DURING my visit to England and the Continent last summer it was my privilege to meet many well-informed men in both the worsted and the cotton industry, and I am glad to take this opportunity of recording the uniform courtesy with which I was received, a courtesy beyond what I had been led to expect to a prospective competitor. For it was largely in the light of expected competition, rather than increased custom, that the proposed tariff changes were at first looked upon over there. Indeed, but for the Balkan War troubles, which seriously affected trade conditions, both in England and on the Continent, it was quite evident in the early part of my visit that, speaking broadly, England at least had no desire greatly to extend her market in the United States for worsted products. Her manufacturers had been too hard hit by previous sudden changes in our tariff to feel disposed to build mills or try to work longer hours to meet a demand which, in their opinion, if created, would not be permitted to last long in this country. They would have been better pleased with less radical changes.

The prospect to them of free wool to us was higher prices for their raw material, whether they or we took an increased quantity of wool. And while this might work unfavorably with former customers, they would prefer to keep the latter at some sacrifice rather than to branch out into our uncertain market. They were met also with another consideration. Any attempt rapidly to increase their output meant labor troubles, not only in the certain necessity of having to pay higher wages, but in the fact that an increased supply of trained operatives was not immediately available. Such a hesitancy to push for greater markets we might call undue conservatism, but to them it spelled wisdom.

### ENGLISH CONSERVATISM.

It is no disparagement to say that the Englishman, particularly the English manufacturer, is habitually conservative. To our way of thinking and acting he often seems to move slowly, but perhaps less often overshoots the mark and less often has to retrace his steps. Above all things he banks upon personal experience and, so to speak, "home-made" knowledge.

Nevertheless his close association industrially with the Continent, where the inventions of his own people have often been brought earlier into use or have obtained a more extended application than at home, has sometimes had a later effect upon his imagination through the financial criterion of the pocket-book. But local conditions usually play the most important part in such apparent lack of initiative in the application of new inventions. For instance, it may not be generally remembered that the vertical circular type of comb, well known in its various modifications in the cotton trade as belonging to the Heilman class, was really first used in England on worsted and dates from the time of Cartwright. The horizontal circular type was, however, rightly recognized as particularly suitable for the longer-stapled English and Colonial wools, and it was left to the Frenchman and the German to develop the former on short-stapled wools and thus materially extend the worsted industry.

To-day the Englishman is coming to his own again and using this type of comb, not only for tops to be used without.

oil on the French system of mule spinning and for recombing colored work, but also, by the utilization of wider pitch and larger barreled bobbins on the ordinary cap spinning frame, is learning how to take advantage of the ability of this type of comb to produce a top of maximum clearness with minimum noiling loss of the shorter fine fibers. The effect of this modification of the spinning frame is to retain these fine short fibers in the spun varn and thus secure fulness and softness of feel, while at the same time securing a maximum weight of material on this class of bobbin. English manufacturers appreciate the advantage of quantity on a spinning bobbin as much as we do, but they do not want it at the expense of quality, whether possible so to spin it or not. The tendency in this country to use long spinning bobbins for cap spun worsted is distinctly objected to over there. They cause too much ballooning with the resulting roughening of the yarn and whipping out of good fiber at otherwise advantageous speeds.

The advantage of using yarns spun without oil for delicate fabrics and light shades is of course well known to the English mills, and it may suffice to say that they are attacking the problem of spinning such yarns in ways to compete with the mule in both quality and quantity. There seems to be little done as yet, however, in using French rovings on ring spinning frames — a method naturally to be expected for short fine wools.

### AUTOMATIC DOFFERS.

On mohairs and lusters England has so long led the world that we may well expect to find in their manufacture the most ultra conservatism. Not only are hand doffed short flyer frames of 124 spindles using short bobbins and slow speeds still the prevailing type, but in many mills may be found identically the same frames made from 30 to 50 years ago. Here is certainly an opportunity for inventive genius, and it will probably come — is in fact already coming through the reflex effect of foreign impact. On such frames the Clough flyer doffer has, I believe, been in use in some Eng-

lish mills for many years, but it appears to have required the competition of a later type of automatic doffer, made also in England but possibly first appreciated abroad, to bring the former's own merits and own improvements to the front where short paper tubes and slow speeds have still been considered essential.

In one mill in particular, long noted for its high class luster yarns, the owner was proud to show me his two spinning rooms making identically the same grade and counts of luster yarns all on short paper tubes. In one room there were twenty frames, hand doffed; in the other, twenty-four frames recently fitted up with Clough automatic doffers. The twenty frames required twelve girls and boys to doff one frame in three minutes. The twenty-four frames required, instead, three young men to doff a frame in from thirty to forty seconds with fewer ends down. This gave him according to his estimate, twenty minutes a day more production on the twenty-four frames than on the twenty frames, with equally as good or better yarn, and at a cost of about five pounds a week less in wages. To the query why he did not at once equip the remaining twenty frames, he replied, no doubt wisely, that he thought he had better wait awhile. was still making good money on the other frames and he much preferred to train up his own spinners from doffers.

But this is not the only type of flyer doffer, there being at least two others in successful use, permitting a materially increased speed of spindles where the stock will admit it. I think both of these makes are in use in this country to a limited extent, and one of them in particular I happen to know of as being extensively exported to Germany.

The cap doffer is the latest competitor in this line for diminishing labor cost. I think that it may be safely stated that this was first worked out at the Arlington Mills, the inventor taking it over to England with bright hopes of making a fortune, but he did not live to see it materialize. It took many years of further development to put on the market the present effective arrangements, of which there are two in the field. I have seen them both in successful operation in

several mills. The doffing time on 180 to 200 spindle frames averages about a minute, often without an end being down upon starting up the frame. This may be compared with the two to three minutes for ordinary hand doffing, and usual number of doffers. Practical spinners whether English or American will realize what this means even if it does not eliminate all of the proverbial crookedness of their particular "if." In spite of its complication and the necessity for exceedingly careful workmanship in its manufacture and close attention to details in its use the automatic doffer has no doubt come to stay.

### COMPLEX PROBLEMS.

It must be at once conceded, however, that no limit should be fixed to possible improvements in any art, particularly in one like textile manufacturing where the record of coördinating experience is so limited. The materials to be worked with are so variable, both individually and collectively, that only the broadest kind of generalization in scientific statement of cause and effect has yet been possible.

Of course it is well known that the German is always actively engaged in searching for the reason why, and applying the results of his research to further advancement in every kind of art. In this country, as in England, in textiles we have been largely content with developing the purely mechanical side. Neither country need be ashamed of the results obtained, but when we compare the effects of research work in chemistry, electricity, and metallurgy upon the arts in general we must realize the importance of better understanding of the fundamental conditions requisite for the best handling of each of the textile fibers. If we limit our consideration to the mere question of atmospheric humidity and temperature under which the different classes of manufacturing can best be conducted, it is evident that there is still an important field for investigation. The more complex and variable the fiber characteristics, the more necessary is it that this knowledge should be as complete as possible. For such materials as wool, silk, and cotton, where the intrinsic value

of each pound is so great, the mere commercial definition of a pound has a vital interest long better understood and appreciated abroad than here. But it is evident that not only are weight and dimensions affected, but strength and elasticity during the processes of manufacture, as well as the feel and appearance to the ultimate buyer.

The writer's limited observations would lead him to believe that the climatic conditions, while varying in different localities in England, are yet such as, speaking broadly, greatly favor the cotton and worsted manufacture, and are of course largely and properly attributable to seacoast surroundings and uniformity of temperature. But this uniformity only aids them to dispense with artificial regulation in certain stages of manufacture. On worsted from top to yarn they are generally ideal. Beyond this some artificial assistance to the material itself is sometimes necessary to enable natural conditions thereafter to be sufficiently effective. But these conditions have been largely made effective only by a sort of rule of thumb practice, which has had a tendency to concentrate certain steps of manufacture to particular localities.

But in the same locality sauce for the goose is not always sauce for the gander. A mohair manufacturer has generally been content to confine himself to this class of material. The manufacturer of Botany yarn knows that somewhat different conditions are advisable in working this material from what are required for crossbred wools, and he will try to avoid manufacturing both, in their wider variations of stock and count of varn, in the same room. Complications increase when cotton and silk are introduced. The mere difference in strength and elasticity of worsted varn and cotton varn under varying conditions of moisture necessitates adjustments in material or circumstances to meet the situation in the best manner. This has too long been left to the purely art side of the question. Its importance, however, is beginning to be recognized both here and abroad and when we take into account the great seasonal variation in this country involving extremes of temperature as well as extremes of humidity the mere statement of the strength of yarn or its count, whether

cotton, worsted or silk, needs more attention to standardizing the conditions under which a test ought to be made. More attention is also needed to the establishing of limits within which the moisture condition of the several fibers can be advantageously varied when worked either together or separately, and this whether applied to the material alone or to the atmosphere in which it is worked.

### QUESTIONS FROM AN ENGLISH MILL.

Just before leaving England I had the pleasure of meeting a Mr. Gaunt of Reuben Gaunt & Sons, Limited, of Farsley, near Bradford, a firm recognized as among the best makers of worsted yarn, and it was evident that this gentleman was giving much thought to the question of how to secure best results in satisfying at the same time his own conditions for good spinning and his weaving customer's requirements for the delivery of yarn in the accepted standard condition. I give below a list of questions supplied by his engineer and forwarded to me here since my return.

- 1. Say the yarn comes out of the mill at 10 per cent regain. How long would it be expected to remain in an atmosphere of 78 per cent humidity to take up another 8½ per cent or total 18½ per cent regain?
- 2. What would be the most suitable conditions or the most suitable percentage of humidity for the yarn to stay in 48 hours to regain from 10 per cent to 18‡ per cent condition?
- 3. Is there a formula for ascertaining the degrees of humidity for different regains? If so could I have an illustration? For instance:—supposing yarn spun in the mill at 50 per cent humidity has a regain of 10 per cent, what percentage of humidity should be maintained for 48 hours for the yarn to absorb a total of 184 per cent?
- 4. Supposing yarn stays in an atmosphere of 78 per cent humidity for 12 hours and the percentage of humidity is changed for 4 hours and then got back to 78 per cent. Will there be any appreciable difference in the condition of the yarn for this time (4 hours)?

- 5. If the atmospheric conditions in a room vary, what would be the best to do to keep the conditions standard?
- 6. Will there be any difference between two rooms, one having a floor made of bricks lying in water, and the other having a floor of bricks saturated in water?
- 7. Has the percentage of humidity required any relation to the atmospheric pressure? If so, how?
- 8. Should fine and thick counts be spun with the same percentage of humidity? Will fine counts such as 80's require more humidity than the thicker counts such as 20's?
- 9. What is Mr. Hartshorne's experience in spinning? Should the amount of humidity be one standard at all times (say 50 per cent) or should the percentage of humidity vary as the dry bulb varies?

It will be noticed that the element of temperature, so much to be considered in this country, is only suggested in one question. As a guide in discussing these questions the accompanying diagram or chart will be useful. It gives curves which have been worked out from humidity tables and from the data given in the writer's paper, "The Laws of Regain." In this diagram or chart the vertical coördinates are degrees of temperature Fahrenheit and horizontal coordinates grains of aqueous vapor per cubic foot.

### REGAIN DATA.

The tables of regain data referred to were obtained upon samples of yarn free from oil, but as experiments have proved that olive oil has no appreciable effect in preventing absorption of moisture and the amount absorbed is strictly in proportion to the dry clean weight of wool, it is only necessary to note that these curves are constructed upon the assumption that the conditions referred to in these questions are concerned with worsted yarn spun from top combed in oil on the Bradford Conditioning House basis of delivery at 19 per cent regain moisture and 3.5 per cent gross loss (oil, etc.) on scouring test, and we may therefore figure thus:

In each 100 pounds corrected weight of top there will be

 $\begin{array}{ll} \mbox{Dry fiber (unscoured)} \ \frac{100}{1.19} = 84 \ \mbox{lbs. or } 84\%. \\ \mbox{Clean dry fiber,} & 84-3.5 = 80.5 \ \mbox{lbs. or } 80.5\%. \\ \mbox{Moisture,} & 100-84 = 16 \ \mbox{lbs. or } 20\% \ \mbox{(nearly) on dry clean weight.} \end{array}$ 

In each pound of this material that is spun into yarn without loss or gain of moisture (or other additions) the same proportions will be found, but comparisons at other conditions of regain, as at 10 per cent, 15 per cent, and 18½ per cent, are tabulated approximately below:

	At 10%.	At 15%.	At 181%.	At 19%.
Clean dry weight	.805 lb.	.805 lb.	.805 lb.	.805 lb.
Moisture	.084 ''	.126 ''	.153 ''	.16 "
Regain % on clean dry weight,	10.4%	15.65%	19%	20%

Hence the double naming of the curves on diagram.

Referring to the questions from Farsley, it may be said at once that an attempt to answer each one categorically would require the assumption of too many important unstated conditions, even if all corresponding data were known. For the purpose of this paper it must suffice to point out certain guiding principles which have been determined with more or less certainty, and others upon which further research work would doubtless be profitable.

But beginning with question 7:

So far as my experiments and study of the subject go the answer is No.

The determination of relative humidity by means of wet and dry bulb thermometer readings is affected by atmospheric pressure, and where barometer readings are far away from 30 inches corrections to the tables usually given should be applied. But when regain conditions are measured in terms of temperature and relative humidity, however obtained, the

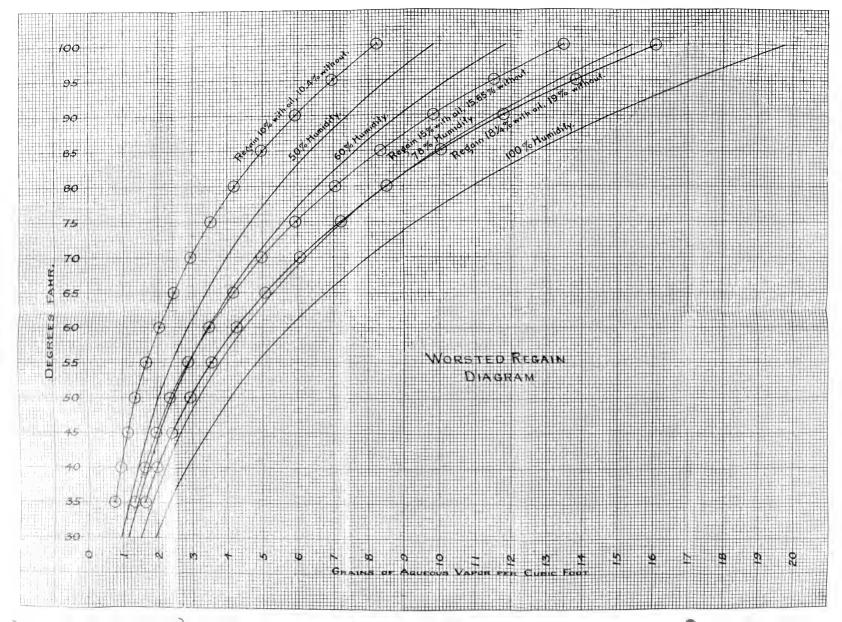
factor of barometric pressure, within the limits of ordinary temperatures at least, is eliminated, except so far as it may affect the *rate* of change from one condition to another, as in drying under the influence of vacuum.

A study of the laws of regain in the pamphlet referred to will afford an answer to the first part of question 3, as will in some measure an examination of the diagram or chart. The second part of this question and questions 1, 2, and 4 are counterparts of the same problem, which is largely one of purpose. The form which the yarn is in, that is whether the material is hard or soft twisted, on its original spinning or twisting bobbins, wound on spools or cheeses, or if in skeins hung up loosely or bundled up and stored in bins or packed in boxes, has much effect upon the results to be expected.

In any case, as shown by the diagram or chart, the temperature of the room must not exceed 80 degrees, or 18½ per cent regain in oiled stock will neither be obtained or retained at 78 per cent humidity. Below this room temperature the rate of absorption will depend upon the degree of exposure, and how cool the stock itself can be kept.

### THE OTHER ENGLISH QUESTIONS.

The only statement that could be made as to the limit of 48 hours would be that the conditions must be so that 81 pounds of water for each 110 pounds of yarn, or for each 100 pounds of varn 7.5 pounds of water, must be supplied and absorbed at the rate of 1,100 grains per hour. But only experiments under the actual conditions could determine whether this would be possible or not. It might be noted, however, that for a storage room temperature of 65 degrees Fahrenheit, not uncommon in England, and a relative humidity of 78 per cent, the chart shows 5.3 grains of moisture per cubic foot, while the curve of 10 per cent regain at this same temperature shows about 2.5 grains per cubic foot, a marginal difference of 2.8 grains to start with. Assuming that the average absorbing rate could be one grain per cubic foot per hour, it would take for each 100 pounds of yarn a little less than 20 cubic feet per minute to supply it.



A room with a floor like either one suggested in question 6 would probably maintain the supply conditions necessary. From what I saw of such floors in England I would prefer the kind made with porous bricks which can be saturated from underneath, and which probably presents a larger evaporating surface than bricks lying in water. In one such room well arranged for storing roving and top I found a temperature of 61 degrees and 91 per cent humidity, a condition corresponding to about 25 per cent regain.

If it were possible to keep the center of the mass of material cooled down below the room temperature, the rate of absorption might be expected to be relatively rapid in whatever form the material was in. But much absorption of moisture by yarn in a loose state, whether rapid or slow, will, under certain conditions of twist and kinds of stock, tend to produce a cockly effect which for smooth faced fabrics should be avoided or counteracted.

In general, therefore, may there not be a better way to condition yarn if such a process be necessary? That it is necessary or at least desirable for best weaving results the English weaver answers by doing so himself when he is his own spinner. A simple, quick and most effective way, also known in this country, I saw in such a mill in England by the use of carefully adjusted water rolls while spooling or cheesing the warp and quilling the filling. Of course, for single yarn when used on the bobbin as spun this method does not apply.

### AMERICAN TEMPERATURE EXTREMES.

To the American spinner it is questions 5, 8, and 9 that afford the most interesting suggestions, for in our climate the extremes of winter and summer require serious consideration for proper modification to get the best conditions for manufacture. To our spinning rooms in winter we must add considerable moisture to keep down electrical effects and in summer we must find means not only of cooling rooms down in extreme hot weather as much as possible but also of actually removing excessive moisture if we would keep our

results at all times equal to our most successful English competitors, even where they have adopted no special means for atmospheric regulation. It is too much to say that this problem has been fully met. It needs considerably more very careful experimenting under absolutely known conditions to realize possible ideals.

In this connection it is interesting to note that a spinning room condition of 50 per cent humidity corresponds in the experience of this spinner to an actual varn state of 10 per cent regain. Reference to the diagram or chart will show that the 50 per cent humidity curve crosses the horizontal temperature line of 65 degrees at 3.4 grains of aqueous vapor per cubic foot, the 70 degree line at 4 grains, and the 75 degree line at 4.7 grains. If these vertical lines be followed up they are seen to cross the 10 per cent regain curve at 74 degrees, 78½ degrees, and 83 degrees, respectively, indicating a local difference in condition equal to a rise in temperature of 9, 84, and 8 degrees at these points. He does not state at what room temperatures his conditions are given, but within the above limits our American experience would expect a similar difference though perhaps not quite so much. While consistent with a good spin on most stocks it is suggestive of the possibilities for decided economic improvement and with ultimate benefit to the material itself.

With an ability by artificial means to keep our fall, winter, and spring room temperature constantly at about 70 degrees, we can also regulate the humidity during these months to such a fair degree of nieety that it becomes a practical matter to know how low this humidity must be and how high it can be for each class of stock and count of yarn to produce the best all around results. Therefore, question 8 might rather be, can we spin 80's of a given stock with as much humidity as we could 20's in the same stock? On the other hand, it is quite probable that we could spin 80's on a suitable stock with more humidity than say 30's on some other stock if this were near its limit of spin. In the summer time, as before noted, the situation is somewhat different and more trouble-some in some localities than in others.

### National Association of Wool Manufacturers.

# FORTY-NINTH ANNUAL MEETING OF THE ASSOCIATION.

The forty-ninth annual meeting of the National Association of Wool Manufacturers was held at Young's Hotel, Boston, on Wednesday, February 4, 1914. Luncheon was served to the members of the Association at one o'clock, and the business session followed. Mr. John P. Wood, of Philadelphia, President of the Association, called the meeting to order, and following the election of officers he addressed the meeting informally, reviewing some of the new activities which had been undertaken by the Association, including the quarterly compilation of information relative to woolen machinery active and idle, the preparation of a semi-annual review of prices of standard goods, varns and tops, the establishment in connection with other textile associations of the Textile Bureau and textile alliance, and the reorganization of the methods of accounting and vouching expenses. Wood also discussed other fields of work which he thought the Association should enter on behalf of the industry, such as the promotion in the woolen industry of the campaign for the prevention of industrial accidents; exposure of the fallacies of the so-called fabric labeling bills now before Congress, and the satisfactory disposition of the much-discussed subject of standards of "condition" in manufactures of wool.

The Nominating Committee of the Association, consisting of Messrs. J. F. Maynard, Chairman, Edwin Farnham Greene, Charles W. Leonard, Thomas Oakes, and James R. MacColl, reported to Chairman Maynard the following list of officers for the year 1914:

### OFFICERS FOR 1914.

### PRESIDENT.

John P. Wood . . . . . . . . . . . . . . . . . Philadelphia, Pa.

### VICE-PRESIDENTS.

WILLIAM M. WOOD					Boston, Mass.
FREDERIC S. CLARK					No. Billerica, Mass.
George H. Hodgson					Cleveland, Ohio.

### SECRETARY AND TREASURER.

Winthrop L. Marvin . . . . . . Boston, Mass.

I	ΞX	EC	UTI	VE	C	)M	міт	TE	Ε.	
Andrew Adie										Boston, Mass.
CHESTER A. BRAMAN										New York, N.Y.
Frederic C. Dumaine										Boston, Mass.
WALTER ERBEN										Philadelphia, Pa.
FREDERICK C. FLETCHE	ΞR									Boston, Mass.
Julius Forstmann										Passaie, N.J.
HENRY A. FRANCIS										Pittsfield, Mass.
Louis B. Goodall										Sanford, Me.
EDWIN FARNHAM GREE	EN	Е								Boston, Mass.
Joseph R. Grundy .										Philadelphia, Pa.
Franklin W. Hobbs										Boston, Mass.
JOHN HOPEWELL .										Boston, Mass.
FERDINAND KUHN										Passaic, N.J.
GEORGE E. KUNHARDT										Lawrence, Mass.
CHARLES W. LEONARD					:					Boston, Mass.
JAMES R. MACCOLL										Pawtucket, R.I.
WILLIAM MAXWELL										Rockville, Conn.
J. F. MAYNARD										Utica, N.Y.
Joseph Metcalf .										Holyoke, Mass.
THOMAS OAKES										Bloomfield, N.J.
WILLIAM II. SWEATT										Boston, Mass.

The President inquired if there were any other nominations to be made. None were presented, and it was voted that the Secretary be instructed to cast one ballot for the officers as nominated for the ensuing year. Thereupon President Wood declared the nominees duly elected.

The report of the Treasurer, showing an increased income and a substantial balance in the treasury, was read, accepted and placed on file. The report of the auditor, Mr. Frederic S. Clark, one of the Vice-presidents of the Association, stated that the books and vouchers were properly kept, and that the receipts and expenditures were as had been indicated.

The report of the Secretary was read, and it was voted that it should be accepted, approved, and printed in the Bulletin. The report of the Secretary was as follows:

### REPORT OF THE SECRETARY.

To the Members of the National Association of Wool Manufacturers:

As required by the by-laws of the Association, the Secretary herewith submits his report for the year ending with the last day of January, 1914.

The year 1913 was less favorable for wool manufacturing than the twelvemonth that preceded it. A strike of garment workers early in the year in New York and other Eastern clothing centers partly paralyzed for several months the industry that is the chief customer of American woolen mills. Later on the active consideration of the tariff question in Congress, and doubt from month to month as to the final provisions of that measure, disturbed the country and depressed all business. Whatever may be the results of the new tariff policy on which we are now embarked, it is a relief to have an ending of uncertainty.

In April last the new anti-protectionist Congress was called in special session for its appointed task of revision and reduction of the Aldrich-Payne tariff law. This special session was preceded by hearings before the Committee on Ways and Means, at which a memorial embodying the views and recommendations of the wool manufacturers was presented by the President of this Association. The Underwood tariff bill, offered to the House on April 7, 1913, contained in the wool and woolen schedule an important change from the bills which President Taft had vetoed. In those earlier measures raw wool was subject to a duty of 20 per cent ad valorem, and the Ways and Means Committee was prepared to embody in the new Underwood wool and woolen schedule a duty of 15 per cent. But President Wilson insisted that

both wool and sugar should be put upon the free list, and the desired amendments were made at once by the House committee. In the original Underwood bill, with a 20 per cent duty on raw wool, tops had been dutiable at 25 per cent, yarns at 30 per cent, cloths at 40 per cent, and dress goods at 45 per cent. In the new Underwood bill, with wool on the free list, the duty on tops was made 15 per cent, on yarns 20 per cent, and on cloths, dress goods and clothing 35 per cent.

On April 22 the new tariff bill, having been duly considered by the Committee on Ways and Means, was reported back to the House by Chairman Underwood, and on May 8 it was passed by the House on a division of 281 to 139. the Senate the Committee on Finance decided that no formal hearings would be held, but sub-committees of the committee were appointed to consider the various schedules of the bill, and the sub-committee on the woolen schedule consented to listen to a few accredited representatives of the industry. By invitation of this sub-committee your Secretary appeared on May 21, presented the formal remonstrance of the Association against the bill as proposed, asked for an interval of at least six months between the taking effect of free wool and the taking effect of the reduced duties on manufactures, urged a higher rate on woolen hosiery, and suggested various other changes of detail. A concise statement of the unfortunate effect of the Gorman-Wilson law on the American wool manufacture was also presented to the sub-committee. Subsequently other arguments and briefs were presented to this sub-committee by Mr. William Whitman and Mr. Julius Forstmann.

Few changes were made in the woolen schedule of the House bill by the Senate Committee on Finance. But one of these changes made the hair of the Angora goat and alpaca free of duty—the House, though making wool free, had left on these materials a rate of 20 per cent. On June 20 the new tariff bill was laid before the Democratic Senatorial caucus, and was under consideration there up to July 7. The radical element among the Democratic Senators reduced the duty on tops to 5 per cent and on yarns to 15 per cent, while woolen blankets valued at less than 40 cents

a pound were put upon the free list. Raw wool was made to take effect on December 1, 1913, while the reduced duties on goods were to take effect on January 1 following. Chairman Simmons reported the revised bill to the Senate on July 11, and it passed the Senate on September 9, on a division of 44 to 37.

The Secretary, on behalf of the Association and through briefs presented both to the leaders of the Senate Committee on Finance and to the members of the Conference Committee of the two houses, urged an increase in the duties on tops and yarns, which were advanced from 5 and 15 to 8 and 18 per cent. A protest was made to the Conference Committee against the placing of blankets valued at less than 40 cents a pound on the free list. These blankets were removed from the free list and restored to the dutiable list at 25 per cent, as had been suggested. Moreover, as urged on behalf of this Association, the Senate finally left unchanged the House wording of the basket clause of the cotton schedule, so that manufactures in part of wool, but of which cotton was the component material of chief value, should clearly fall within this paragraph and be dutiable at 30 per cent. In another brief an earnest request was made that a provision of the Senate bill reducing the duty on flannels valued at above 50 cents a pound to 25 per cent be amended and the House rate of 35 per cent restored. An increased rate of 30 per cent was granted by the Conference Committee. Woolen hosiery, dutiable in the House bill at 35 per cent, was advanced to 40 per cent. In the final draft of the bill the House prevailed, and a duty of 15 per cent was placed on the hair of the Angora goat and alpaca, though wool was left free.

It is gratifying to record that the greater part of the changes in details of the new tariff measure which were sought by us in briefs and petitions to the House and Senate committees, to remedy manifest inequalities and inconsistencies, were granted. Both the Senators and Representatives whom your Secretary had occasion to address were invariably courteous and considerate, and the political attack upon an alleged "insidious" lobby, launched from the White House against the spokesmen for American industries in

Washington, apparently had no effect in arousing distrust or prejudice so far as these responsible lawmakers were concerned.

The new tariff measure is based upon principles which protectionists hold to be unsound and unworkable. But this Association has dealt in entire good faith with the authors of this measure, stating to them frankly at the first hearings before the House committee the lowest rates of duty under which, in our judgment, the various branches of the industry could endure. Both then and later on, when the new tariff for revenue only was under consideration in the Senate, all the information at our command was offered to the Congressional committees, and obscurities in the wording of the bill and inconsistent provisions or unsymmetrical rates were pointed out as frankly to the framers of the bill as they would have been if these framers were protectionists.

If the woolen schedule of the Simmons-Underwood law fails to conserve the welfare of the industry and the interests of the government, it will not be because of any lack of timely warning or prompt and definite information from the manufacturers. We have done our whole duty toward the men who, for the time being, hold the responsibilities of government.

Since the enactment of the new tariff on October 3 the officers and committees of the Association have been active to safeguard the interests of the industry. A most important step has been taken in the organization of a Textile Bureau, of which the President of our own Association is to be the active head, the purpose of which is to be to detect and prevent the fraudulent undervaluation of imported manufactures. This work is being undertaken by us in coöperation with the American Association of Woolen and Worsted Manufacturers, the National Association of Cotton Manufacturers, the Arkwright Club and the American Cotton Manufacturers' Association. To make the work of this Bureau a success, the active assistance of manufacturers is indispensable, and the members of the Association are urged to communicate promptly to the Director of the Bureau any information relative to probable undervaluations and to refer to the Bureau any questions concerning the interpretation of the existing tariff law or customs regulations. An office for the Bureau is about to be established in New York.

Another important work of this Association is an effort to establish standards for conditioning in the woolen industry. A special Committee on Conditioning will very soon be prepared to recommend standards for general use.

The Association has joined with other organizations interested in an effort to suppress dishonest trade practices in the sale of mill supplies.

On the recommendation of your President and by direction of the Executive Committee, a census of active and idle woolen machinery will be undertaken at least quarterly, and the general results will be published in the Bulletin and communicated to manufacturers and others interested. Current prices of certain standard yarns and cloths will be carefully recorded and also published in the Bulletin, and it is believed that our statements both of active and idle machinery and of prices of representative manufactures will prove of increasing value.

The Director of the United States census and his associates have consulted with representatives of this Association in regard to the possible improvement of the inquiry schedule for the wool manufacture, and in regard also to securing from manufacturers prompt and complete returns so as to facilitate the early issue of the reports of the coming Federal census.

The Association in its enlarged membership represents the major portion of the active, successful woolen machinery of the United States. Its resources of late years have been steadily strengthened, and with this there has come a broadening of the field of its practical work.

Respectfully submitted,

WINTHROP L. MARVIN,

Secretary.

Boston, February 4, 1914.

### THE NEW TARIFF AND THE NATIONS.

HAS OUR YIELDING OF PROTECTION WON THE FAVOR AND FRIENDSHIP OF THE WORLD?

By WINTHROP L. MARVIN.

It is not in human nature to be satisfied. For many years the prophets of free trade have been proclaiming that it was only necessary for the United States to abandon its "barbarie" system of tariff protection to win the friendship and favor of all nations. The protective tariff has been assailed by advocates of peace-at-any-price as the great, insuperable barrier to universal peace and concord. Throughout the recent debate in the American Congress on the Simmons-Underwood tariff for revenue only, the measure was repeatedly hailed by its protagonists as a long and mighty step toward that desideratum of poets and dreamers, the complete effacing of international boundaries and racial patriotism in a parliament of man and a federation of the world.

This new non-protectionist tariff as a whole has now been for six months the law of the United States, and it is agreed on all hands that not for many years has this country confronted such general menace and dislike from other peoples and other governments. Under the administrations of McKinley, Roosevelt and Taft, from the war with Spain onward, it was believed in our own land and frankly acknowledged abroad that the United States of America was the most conspicnous, the most potent, the most admired of nations, and the most effective for world peace. There was peace with our neighbors in this and the other hemisphere, and so smooth and monotonous were our international relations that the Department of State was enabled to forget tangling disputes in an earnest and systematic effort to promote our foreign trade. "Dollar diplomacy" was a sign and proof that no more vexing foreign question faced this nation of shopkeepers.

But now all this has lamentably changed. Quarrels and recriminations are found on every hand. The new President and his party leaders vigorously proclaim, in an effort to force a settlement of the Panama tolls dispute, that the former prestige of the United States is wholly lost, and that our government no longer has a friend among the nations. What about the new low tariff and its wonderfully propitiating influence? The preparation and enactment of that law were certainly acclaimed in Europe and elsewhere as a most admirable stroke of altruistic statesmanship. Its abundant favors should have been thankfully received, and there should have been an instant reciprocal upspringing of esteem and affection from all the nations of the world.

But the new tariff has failed as signally to bring about this universal peace and concord as it has to bring prosperity to the farms and workshops of America. The opening of soup houses for the unemployed of the "New Freedom" has been coincident with the sounding of international alarms in There is trouble with Mexico, strife with Washington. England, Germany, Japan. All the great governments of the world are averting their faces from their supposed benefactors, and President Wilson has driven his Democratic Congress to take a quick back track on the tolls clause of the Panama treaty. In his campaign for election Mr. Wilson was an outspoken champion of free tolls for American shipping at Panama. In a formal address before an audience of 2,500 farmers at Washington Park, N.J., August 15, 1912, the Democratic Presidential candidate had said:

There is another matter you know, we are digging a tremendous ditch across the Isthmus of Panama. It is predicted by the engineers in charge of that colossal enterprise that we shall be able to open it to the ships of the world by the year 1915. What interest have you in opening it to the ships of the world? We do not own the ships of the world. By a very ingenious process, which I would not keep you standing in the hot sun long enough to outline, the legislation of the United States has destroyed the merchant marine of the United States. The chief road by which your crops travel to the Orient is through the Suez Canal.

They do not go around by the Pacific. Most of your maps do not show you the short road to the Orient, because they

are spread out flat.

If you will get a globe and draw a circle around the globe you will see your short road is through the Suez Canal, not across the Pacific, and that the Western farmer, therefore, has to ship his crops across the continent in order to reach the ships that are to take that road. And when his crops reach the port, do they find American ships waiting for them? Not at all. In most years not a single ship carrying the American flag goes through that canal carrying freight.

Some ships carry the American flag through that canal, but they are mostly private yachts. A friend of mine who has just traveled around the world told me that he did not see the American flag once between New York and Hong Kong, going by the way of the canal, until he reached the Island of Ceylon, and then saw the flag of Mr. James Gordon Bennett's yacht. If the ship-owners of the nations carry your grain and cargoes they are going to carry them by routes and to markets which suit them, not the routes and the markets which are chosen by you.

One of the great objects in cutting that great ditch across the Isthmus of Panama is to allow farmers who are near the Atlantic to ship to the Pacific by way of the Atlantic ports, to allow all the farmers on what I may, standing here, call this part of the continent, to find an outlet at ports of the Gulf or the ports of the Atlantic seaboard, and then have coastwise steamers carry their products down around through the canal and up the Pacific coast or down the coast of South America.

Now, at present there are no ships to do that, and one of the bills pending — passed, I believe, yesterday by the Senate as it had passed the House — provides for free toll for American ships through that canal and prohibits any ship from passing through which is owned by any American railroad company. You see the object of that, don't you? We don't want the railroads to compete with themselves, because we understand that kind of competition. We want water carriage to compete with land carriage, so as to be perfectly sure that you are going to get better rates around the canal than you would across the continent.

The Democratic national platform on which Mr. Wilson was then standing proclaimed:

We favor the exemption from tolls of American ships

engaged in coastwise trade passing through the Panama Canal.

Speaking in this same address on that same day Mr. Wilson said:

Our platform is not molasses to catch flies. It means business. It means what it says. It is the utterance of earnest and honest men, who intend to do business along those lines and who are not waiting to see whether they can catch votes with those promises before they determine whether they are going to act upon them or not. They know the American people are now taking notice in a way in which they never took notice before, and gentlemen who talk one way and vote another are going to be retired to a very quiet and private retreat.

Now, having caught his flies President Wilson has turned squarely about, and in order to catch the favor of foreign governments has forced through the House a flat repudiation of his party platform and his own preëlection pledge — not because this is right, for he knows that the majority of the Democratic Senators and Representatives do not agree with him, but because the expedient of imposing tolls upon American coastwise ships has come to be regarded by him as desperately necessary to "propitiate" the favor of foreign chancelleries, which dread and resent the application of a protective policy in any form to the American merchant marine.

Will this prove any more successful than the taking of protection away from American manufacturers? Does not the history of our nation and of every other nation show that the good-will of the world may be won but cannot be purchased? Through many years of vigorous protectionism the United States held a position of honor and of influence in Christendom. If not all nations were our friends, at least no nations cared to make us feel they were our enemies. Secretary Bryan himself, as fervent an advocate of free trade as he is of peace-at-any-price, is confronted in the first flush of the new non-protective tariff policy by more sus-

picion and criticism and downright enmity toward our government than have been manifest at any one time, except, perhaps, in the two first critical years of our Civil War.

It might be thought that the radical reductions of duty on the principal products of other manufacturing nations would make their governments content, at least for the time being -but this is not so. It would, of course, be absurd and impossible for these other governments to complain that the tariff reductions were not radical enough for a first effort. But these governments are vehemently complaining against the "exactions" of the administrative sections of the new tariff law that seek to compel foreign manufacturers and importers to deal honestly with the government of the United States.

There is nothing particularly new in these administrative sections. A very much more stringent administrative plan was originally adopted on the passage of the new tariff law by the House of Representatives. But a powerful delegation of importers went over to Washington - with no fear of the lobby investigating committee before their eyes - and with the help of the European embassies and legations succeeded in eripping the most virile provisions of the administrative paragraphs which the House in conference only partially restored.

Nevertheless the demand is now loud from foreign importing and manufacturing agencies in New York City for a repeal of these "restrictive customs administrative regulations." "The effect of the measure," they insist, "is not proving all that had been desired." It is acknowledged that the government, in its fierce zeal to "propitiate" foreign opinion, has agreed that the most objectionable provisions "should not be enforced." But even this has failed to satisfy the foreign beneficiaries of the new tariff for revenue only. They insist with increasing heat and increasing confidence that the administrative customs measure must be thoroughly emasculated by Congress if the full anticipated benefits of the new policy are to be realized by the people of other countries, and their favor and friendship assured.

Such a demand may well give pause to thoughtful Americans of either party or of any phase of economic opinion. We have made important concessions to foreign governments and foreign manufacturers in the new tariff law of the United States. Those concessions have utterly failed to win the favor of foreign governments, which are more critical and hostile toward our government than ever before. Now still further concessions are being demanded. But will even these suffice? This nation of ours once, in the days of its infancy and weakness, set out to buy, by concessions, the favor and friendship of certain governments on the north shore of Africa. We sent to them presents of money, ships and guns, but we speedily found that the more tribute we paid the more trouble we encountered. Is it possible that in our dealings with governments supposedly more civilized and liberal than the Barbary Powers, history is simply going to repeat itself?

## PRICES OF WOOLEN GOODS.

A COMPARISON OF FIGURES IN 1860, 1890 AND 1912, FROM GOVERNMENT RECORDS AND DATA OF THE MILLS.

An elaborate report on wholesale prices, from 1890–1912 in particular, but with comparisons on some lines going back as far as 1860, has just been published by the Bureau of Labor Statistics of the Department of Labor in Washington. This Federal report, brought out under an anti-protectionist Administration, fails to sustain a too prevalent popular impression that the prices of the necessaries of life were far lower in the "good old days" of the previous generation than they are now or lately have been. This Federal Bureau discovers as a result of its systematic research that the wholesale prices of all commodities in general that enter into its study of the cost of living were 5.2 per cent lower in 1912 than they were in 1860. The commodities which this inquiry considers are:

Farm products.
Food.
Cloths and clothing.
Fuel and lighting.
Metals and implements.

Lumber and building materials. Drugs and chemicals. House furnishings. Miscellaneous.

It is particularly interesting, in view of much recent political denunciation of the textile schedules, to note that the prices of cloths, woolen and cotton together, hosiery and yarns were 14.3 per cent lower in 1912 than they were in 1860—a level far below the average for all commodities. On the other hand, farm products are shown to be 46.3 per cent higher in wholesale price in 1912 than in 1860, and lumber and building materials 51.1 per cent higher. It is manifest, therefore, that the cloths that go into the clothing of the people in the course of a half century have not added to any burdensome cost of the necessaries of life.

Moreover, so far as the apparel of the American people is concerned, not only is it 14.3 per cent lower in price now than in the year preceding the Civil War, but, as all conversant with the textile trades know, the apparel of the people is incomparably superior in quality. In the decade before 1860 from one-third to one-half of the woolen fabrics bought and worn in this country were the imported products of European mills. Some of these imported fabrics were excellent and durable, but others were poor stuff. A considerable part of the production of the American woolen mills was of moderate value, though of good wearing quality, such as the satinets of the period, a fabric composed of a cotton warp and an all new wool filling, making a very serviceable cloth. Cotton was used far more largely then than now in combination with wool for the making of fabrics for clothing, and the finer and higher-priced cloths were nearly all imported from Europe. Indeed, so ill developed was the American wool manufacture that throughout the Civil War all the bunting flags that floated over the ships and garrisons of the Union were of British make. There can be no doubt whatever that the woolen fabrics worn to-day by the American people are much more largely composed of pure wool than the fabrics worn in the years preceding the great conflict over slavery.

It is true that from 1890 onward there has been some advance in the cost of woolen cloths, due principally to an increase in the wages of mill employees amounting to upwards of 40 per cent. The cost of mill buildings and equipment has also advanced, and the cost of many materials and supplies also. But even allowing for these circumstances, the Federal inquiry demonstrates that the cost of woolen cloths has not increased in any such degree as has the cost of other essentials of daily life.

The report of the Federal Bureau of Labor Statistics states that while the average prices of commodities in general were 33 per cent higher in 1912 than the average of the prices for 1890–1899, the prices of cloths, as considered in the inquiry,

were 20 per cent greater, or markedly below the advance in the price of commodities in general. Details of price ranges are given which prove this circumstance even more positively so far as woolen fabrics are concerned.

These are the Federal records for the prices per yard year by year of fine black broadcloths from 1890-1912, inclusive:

BROADCLOTHS: FIRST QUALITY, BLACK, 54-INCH, XXX WOOL.

	Average Price		Price		Price
Year.	Per Yard.	Year.	Per Yard.	Year.	Per Yard.
1890	\$1.97	1898	\$1.70	1906	\$2.02
1891	1.97	$1899 \dots$	1.70	$1907 \dots$	2.02
$1892 \dots$	$\dots$ 1.97	1900	1.87	1908	2.00
1893	1.97	1901	1.91	1909	2.02
1894	1.58	1902	1.91	1910	2.04
$1895 \dots$	1.38	1903	1.91	1911	2 02
$1896 \dots$	1.38	1904	1.91	1912	2.07
1897	1.70	1905	1.99		

Following are the prices of standard flannels in the same period:

FLANNELS: WHITE, 4/4, BALLARD VALE No. 3.

Year.	Average Price Per Yard.	Year.	P	rice	Year.	Pri	ce
1890	\$0.44	1898	\$	0.36	1906	\$	0.46
1891	44	$1899 \dots$		.37	1907		.46
1892	43	1900		.40	1908		.46
1893	41	1901		.38	1909		.45
1894	35	$1902 \dots$		.39	1910		.46
1895	30	1903		.43	1911		.43
1896	32	1904		.44	$1912 \dots$		.45
1897	31	1905		.44			

Both the Slater broadcloths and the Ballard Vale flannels are particularly valuable for purposes of comparison because the composition of these well-known fabries has remained substantially unchanged through many years, and both fabries represent a high level of attainment in two branches of the woolen manufacture.

Following are the prices of certain standard overcoatings:

Overcoatings: Covert Cloth, 14-ounce.

	Average Price		Average Price		Average Price
Year.	Per Yard.	Year.	Per Yard.	Year.	Per Yard.
1890	\$2.46	1898	\$2.26	$1906 \dots$	$$2.25$
1891	$\dots 2.46$	1899	$\dots$ 2.44	1907	2.25
$1892 \dots$	2.46	1900	2.36	1908	2.25
1893	$\dots 2.46$	1901	$\dots$ 2.26	1909	2.02
1894	2.42	1902	2.26	1910	1.90
1895	$\dots$ 2.32	1903	2.18	1911	1.80
$1896 \dots$	2.03	$1904 \dots$	2.18	1912	1.91
1897	1.94	$1905 \dots$	2.25		

It will be observed that the price of the covert cloth overcoats not only has not increased, taking all the years under consideration, but has markedly declined. It should, of course, be borne in mind that sometimes the prices of woolen fabrics are affected by considerations of fashion and popularity.

Following are the prices of typical suitings of various kinds:

Year.	Suitings: Clay Worsted Diagonal, 12-ounce.	Suitings: Clay Worsted Diagonal, 16-ounce.	Sultings: Indigo Blue, All Wool, 14-ounce, Middlesex.
	Average Price Per Yard.	Average Price Per Yard.	Average Price Per Yard.
890			\$1.54
891			1.54
892			1.54
893			1.50
894			1.46
895	\$0.76	80.94	1.15
896	.73	.88	1.13
897	.75	.98	1.04
898	.91	1.12	1.13
899	.94	1.14	1.13
900	1.08	1.34	1.13
901	.91	1.11	1.18
902	.91	1.09	1.31
903	.94	1.12	1.44
904	$\cdot 92$	1.10	1.44
905	1.09	1.30	1.53
906	1.21	1.47	1.71
907	1.17	1.40	1.71
908	1.11	1.33	1.57
909	1.23	1.48	1.57
910	1.22	1.45	1.57
911	1.09	1.27	1.48
912	1.21	1.40	1.52

Following are the prices of women's dress goods of various kinds:

Year.	*Women's Dress Goods: Cashmere, All Wool, 8/9 Twill, 35-inch, Atlantic Mills.	Women's Dress Goods: Cashmere, Cotton Warp, Atlantic Mills F.	Women's Dress Goods: Panama Cloth, All Wool, 54-inch.
	Average Price Per Yard.	Average Price Per Yard.	Average Price Per Yard.
1890	\$0.34	\$0.18	\$0.59
1891	.36	.18	.61
1892	.37	.17	.61
1893	.32	.14	.60
1894	.24	.13	.49
895	.23	.12	.43
896	.19	.12	.41
1897	.23	.13	.42
898	.25	.14	.45
899	.32	.15	.48
1900	.34	.16	. 60
1901	.32	.15	.53
902	.32	.16	.55
1903	.33	.16	.58
904	.34	.17	.58
.905		.20	.67
906	.39	.21	.68
.907	.39	.22	.65
.908	.31	.21	.69
909	.34	.22	.70
910		.22	.69
.911	.35	.21	.67
1912	.34	.21	.65

<sup>\*</sup> Cashmere, all wool, 10/11 twill, 38-inch, Atlantic Mills, to 1908 inclusive.

Following are prices, not quoted by the government but furnished from other sources, showing the range on a certain favorite kind of Talbot twill flannels, 27 inches wide, weighing 4% ounces, from 1872–1888 and from 1911–1913:

TALBOT TWILLED 3/4 FLANNEL.

Year. P			Average Price Per Yard.	Year.	Average Price Per Yard.
1872	\$0.59	1879	$\dots$ \$0.37\frac{1}{2}	1886	\$0.321
1873	$.47\frac{1}{2}$	1880	47½	1887	31½
1874	$.47\frac{1}{2}$	1881	41	1888	27½
1875	.41	1882	39		—
$1876 \ldots$	.36	1883	37½	1911	36
1877	.36	1884	35	1912	34
1878	.34	1885	331	1913	38

Here, again, is a fabric of marked value and sustained quality, the composition of which has not changed year after year, which can be had at a lower price now than was secured for it in the early seventies.

It is, as is well known, a difficult undertaking to make comparisons of the prices of woolen fabrics covering many years. Fashion is so capricious and the composition and methods of manufacture change so rapidly that fabrics in large use at one time may in a few years be only a memory. Fancy fabrics, of course, succeed each other with bewildering swiftness, and even staple fabrics are so susceptible to the mandates of fashion that for a time they may disappear from general use—and in that case, of course, the prices quoted are merely nominal.

These facts always baffle efforts to present a really comprehensive statement of woolen prices — so radical are the changes in the characteristics of woolen goods. Thus in 1893 the National Association of Wool Manufacturers published quotations of prices of domestic woolen goods for thirty years, based upon investigations by the Committee on Finance of the United States Senate. Three years later the Association made a similar review, but discovered that of the twenty-three standard varieties of woolen fabrics whose prices were given in 1892-1893, four had wholly ceased to be manufactured, while the composition of other fabrics had been so changed that no exact or even approximate comparison was possible. A 3-4 cashmere made by the Pacific Mills from 1874-1891 was abandoned in the latter year. The longfamous Harris 3-4 "double and twist" cassimeres, that had been made ever since 1841 without any variations in stock or material, were given up about 1890, as was the Harris allwool black and white 3-4 check dating from the year 1853. Fortunately such celebrated staple fabrics as Slater broadcloths and Ballard Vale flannels and a few others still remain to afford a safe basis for comparison.

It is interesting to compare the recent prices of Slater broadcloths—a little more than \$2 a yard—with the prices paid for broadcloths of good quality in the days of the infancy

of the wool manufacture in America. In 1825 a factory at Northampton was regarded as the oldest and best established woolen mill in Massachusetts. Its cheapest quality of blue broadcloths sold at the factory brought about \$3 a yard, while broadcloths of finer quality of the best American or Saxony wools sold from \$5 to \$7. These were the fabrics that went into the making of the elaborate ceremonial suits of the well-to-do gentlemen of the community — the brass-buttoned suits that were brought out only on important occasions, and stored the rest of the time in great tight chests, guarded well from moths and sunlight. This was the cloth and these were the suits that were reputed to last a lifetime.

The well-to-do gentlemen of to-day pay no more and probably not so much on the average per yard for the cloth that goes to make up their clothing. There has been, of course, a wonderful increase in the variety of fabrics, and broadcloths long since lost their old position of dominance in fashion. The well-to-do of to-day doubtless buy and wear many more suits of clothing than did their grandfathers of 1825, but this is one of the consequences of the increased wealth of the country and of the more liberal, not to say extravagant, habits of living of the time. It is probable, however, that a well-to-do man of to-day pays no greater a proportion of his total income for his clothing than did his predecessor of ninety or a hundred years ago.

The wonderful development of the ready-to-wear clothing industry has given the masses of the people a far wider range of choice of articles of apparel than was possible a century or half a century ago, and it is probable that the wage-earners of 1914 are paying on the average no larger a proportion of their income for their every-day clothing than was paid by the working men who bought jeans and satinets in the earlier part of the last century.

## A VENTURE INTO FOREIGN FIELDS.

## THE AMERICAN WOOLEN COMPANY'S PLAN TO MAKE A STUDY OF EXPORT MARKETS.

A NEW departure which has aroused much interest and comment in the textile trade is the effort of the American Woolen Company to investigate and, if possible, enter the markets of the world with American-made fabrics. President William M. Wood has sent several representatives of his company to London, where an office has been established in Golden Square, and inquiry is also being made in Bradford. The undertaking has attracted attention in the United Kingdom, and there is lively speculation among British manufacturers and merchants as to the success of this unexpected "Yankee invasion."

It has always been assumed on the other side of the Atlantic, as indeed in the United States, that large exports of American wool manufactures were not practicable, first because of the relatively high duty of from 45 to 50 per cent in ad valorem equivalent on raw wool for clothing purposes, and second because of the high cost of construction and equipment and the high wage cost of operation of American mills. The first obstacle might have been overcome under former tariff laws by taking advantage of the 99 per cent rebate of duty on materials imported for manufacture here and export. In any event, this obstacle has now been entirely removed by the placing of raw wool on the free list in the Simmons-Underwood tariff law. But the wage difference in the operation of American mills remains unchanged, at least for the present, and it is the insistent opinion of observers abroad that this of itself is sufficient to prevent American competition in the sale of woolen fabrics in the export markets of the world.

However, President Wood considers that his duty to his company requires him to make a thorough investigation of the possibilities of export trade, now that he has wool duty free and foreign goods have easier access to the American market. He has stated that he is not over confident as to the success of the undertaking, and that he recognizes that it will be especially difficult to sell goods in the European home market. But there are other markets in other Continents whose needs are supplied through London, with its unrivalled facilities for observing the conditions of trade and its world-girdling network of steamship communication.

One of the representatives whom President Wood has sent abroad has long been an active selling agent in this country and is familiar with the methods of the trade. Another has had manufacturing experience in Bradford. President Wood says of the effort in his recent annual report: "A thorough investigation is being made of foreign markets and of foreign prices and methods of doing business. In view of the changed economic policy of the United States it has seemed necessary to avail ourselves to the fullest extent of all possible information, and to ascertain definitely whether our excellent woolen goods can be sold in foreign countries."

"There has been a stubborn delusion in this country," President Wood adds, "as to the general excellence of foreign fabrics which experience will do much to remove. It is an ill wind that does not blow some good, and a temporarily increased use of imported woolens cannot but create among the American people as a whole a better appreciation of the superior qualities of domestic woolen cloths, which have already been frankly recognized and acknowledged by importing merchants familiar with both American and foreign fabrics."

It is thus with the belief in the excellence of his cloths that President Wood enters on this undertaking in foreign fields. His inquiry will enable very close comparisons to be made as to the prices of staple and comparable American and foreign goods. It is a earrying of the war into Africa which cannot but command admiration in this country and abroad, and whatever the ultimate result may be, one present consequence undoubtedly is to make British manufacturers

realize that American manufacturers are formen worthy of their steel.

Exports of American wool manufactures for the fiscal years 1911-1912 — the details for 1913 are not yet ready — were as follows:

EXPORTS FROM THE UNITED STATES OF DOMESTIC MANUFACTURES OF WOOL.

		1912.			1911.	
Destination.	Clothing.	Ali Other.	Total.	Clothing.	All Other.	Total.
Europe	\$24,464 17,866 6,598	\$285,801 250,639 35,162	\$310,265 268,505 41,760	\$42,268 21,557 20,711	\$310,890 223,123 87,767	\$353,15 244,68 108,47
North America Canada	1,513,532 1,105,572 299,614 22,209 86,137	369,058 287,233 32,825 18,224 30,776	1,882,590 1,392,805 332,439 40,433 116,913	1,272,699 937,410 278,802 19,565 36,922	349,308 245,665 47,881 13,340 42,422	1,622,003 1,183,073 326,683 32,903 79,34
South America Argentina Brazil Colombia Chile Peru Uruguay Venezuela All other	128,251 104,784 2,932 18,906 67 	33,125 7,912 3,085 1,194 9,789 2,271 2,252 6,280 342	161,376 112,696 6,017 20,100 9,856 2,271 2,252 7,434 860	68,411 66,507 73 226 26 183 720 384 892	86,543 40,581 2,176 953 7,952 3,314 7,135 23,535 897	154,95- 107,088 2,249 1,179 7,978 3,497 7,856 23,919 1,189
Asia	26,649 6,175 17,595 2,101 778	67,696 3,431 771 60,858 2,636	94,345 9,606 18,366 62,959 3,414	3,123 2,450 53 460 160	46,621 6,071 232 36,749 3,569	49,74- 8,52: 286 37,209 3,729
Oceania	41,900 6,378 35,496 26	25,544 $2,465$ $23,021$ $58$	67,444 8,843 58,517 84	48,222 3,229 44,993	48,451 7,944 40,433 74	96,673 10,173 85,424 7-
Africa British S. Africa Egypt All other	8,226 8,226	11,655 833 9,501 1,321	19,881 9,059 9,501 1,321	15,752 15,179 87 486	1,185 451 10 724	16,93' 15,630 9' 1,210
Total	\$1,743,022	\$792,879	\$2,535,901	\$1,450,475	\$842,998	\$2,293,473

It will be observed that the bulk of American exports of woolen manufactures consists of ready-to-wear clothing for which our principal, and indeed our only important, customers are near-by Canada and Mexico, the former taking a total value of more than \$1,000,000 a year. Though British woolen manufactures are admitted into Canada under the

Dominion preferential policy at a rate of duty considerably lower than is imposed on American woolen manufactures, there happens to be among the Canadian people a certain favor for American styles of clothing, and the stores of the principal Canadian cities along the border always contain a considerable stock of American-made apparel. The same influence of nearness and neighborliness explains the sales of American ready-to-wear clothing in Mexico. The only foreign market which consumes as much as \$100,000 worth of this American clothing is the Argentine Republic.

Exports of American cloths and dress goods to the markets of the world in general, as will be seen from the above statistics, are inconsiderable. Our exports of manufactures of wool, clothing, cloths, dress goods, etc., for the year 1913 were \$2,535,901. The total annual production of wool manufactures in the United States as given in the Federal census of 1910 is \$507,166,710. This includes the production of the woolen, worsted, felt, wool hat and carpet and rug industries, but not the product of the ready-made clothing industry, the total value of which is upwards of \$600,000,000. Therefore the plain truth is that at present probably not more than one-half of one per cent of the American wool manufacture finds a market abroad.

But woolen fabrics form an important part of the great export trade of the United Kingdom. This commerce is the development of several centuries of assiduous effort. British wool manufacturers gained their hold upon the markets of the world many years ago under a rigorous protective system. So firm is the British hold to-day upon these world's markets that German and French manufacturers are compelled to consider London in the transaction of their own business with their foreign customers, and the British capital remains the center of this as well as of other important branches of export trade.

Following is a full statistical record of the exports of British wool manufactures to all parts of the world — showing the importance and the wide diversity of the British markets:

# EXPORTS OF BRITISH MANUFACTURES OF WOOL, CALENDAR YEARS 1912 AND 1913, AS SPECIFIED BY COUNTRIES.

From British Board of Trade Reports.

## Worsted Yarn.

		19	12.	1913.	
		Pounds.	Value.	Pounds.	Value.
Russia		2,049,700 1,291,200 1,475,600	£237,537 140,710 141,984	1,589,500 1,221,200 1,532,000	£196,863 132,795 157,771
Denmark		2,034,600 34,561,300 1,051,700 959,500	196,583 3,067,058 96,554 80,421	1,962,800 29,475,000 1,500,100 1,440,800	201,816 2,770,678 146,758 129,980
France Portugal Spain Italy		1,735,900	165,719	1,422,100	145,649
Greece Turkey Egypt China and Hong Kong					
Japan United States Mexico Peru		53,200	7,245	73,400	8,96
Chile					
Argentina British South Africa					
New Zealand	· · ·	11,566,400	1,179,583	9,700,600	1,102,82
Total		56,779,100	£5,313,394	49,917,600	£4,994,08

British worsted spinners have one particularly important customer — Germany, whose takings annually are in the neighborhood of 30,000,000 pounds, some of which is woven in German mills and returned in the form of finished fabrics — to the despair of British manufacturers. Russia and Denmark are the next most important purchasers of British yarns, which indeed find a fairly good distribution on the continent of Europe. But, under the Aldrich-Payne and preceding protective tariffs, British spinners were able to send only insignificant quantities into the United States. Now there may be a different story.

Alpaca, Mohair and Cashmere Yarns.

	191	2.	191	13.
	Pounds.	Value.	Pounds.	Value,
Russia	1,463,600	£251,306	1,252,800	£261,575
Sweden	1,100,000	2, 201,000	1,202,000	2.201,010
Norway				
Denmark				
Germany	11,042,300	1,317,018	12,879,300	1,543,616
Netherlands	11,042,000	1,011,010	12,013,000	1,040,010
Belgium	538,500	63,767	624,900	74,163
France	1,056,800	128,109	1,017,700	122,088
Portugal			1,011,100	122,000
Spain				
taly				
Treece				
Turkev				
Egypt				
China and Hong Kong				
Japan		<b>.</b> . <b>.</b> .		. <b>.</b>
United States				
Mexico	1			
Peru		<b></b>	<b></b>	
Chile			!	
Brazil				
Uruguay				
Argentina		<b></b>		
British South Africa				
British East Indies				
Australia		<b>.</b> . <b>.</b> .		
New Zealand				
Canada	1			
Other countries	1,393,000	165,646	1,446,700	170,29
70 · 4 · 1	75 101 000	# 1 005 0 10	75.001.400	00 171 70
Total	15,494,200	£1,925,846	17,221,400	£2,171,73

Germany is Britain's chief customer for alpaca, mohair, and cashmere yarns, as of worsted yarns—taking, in fact, two-thirds or more of all exported. German weaving is both skilful and low-priced, and the manufacturers of the Fatherland have managed to import British yarns and then to meet the competition of British fabrics in neutral markets.

Woolen Tissues.

	19	12.	19	13.
	Yards.	Value.	Yards.	Value.
a				
en	190,900	£54,112	237,900	£61,491
av	158,900	31,943	174,200	33,297
	807,800	133,301	696,600	124,430
	6,731,200	1,804,054	5,712,900	1,532,241
	4,192,600	531,519	4,340,900	499,863
	3,814,100	583,194	4,322,100	637,943
	5,459,900	1,523,081	5,508,500	1,481,425
	107,700	25,567	104,400	29,187
	278,000	71,246	291,000	79,299
	1,311,300	318,812	1,384,500	341,922
	964,600	115,313	1,313,000	205,267
	3,200,600	336,987	2,159,500	245,727
	520,500	87,819	362,100	67,365
	8,199,300	650,549	6,578,500	527,792
	4,992,700	518,146	7,669,900	771,514
	2,082,800	450,274	2,189,800	482,822
	412,500	87,051	360,200	71,000
	1,066,700	120,594	1,095,300	124,964
	2,833,500	391,994	2,839,800	405,963
	2,046,300	269,814	2,060,000	291,435
• • • • • •	977,400	108,984	896,800	120,410
	5,983,300 2,096,500	859,177 202,833	7,294,200 1,926,300	1,046,116 212,627
	7,876,800	504,724	11,783,000	711,836
· · · · · · · · ·	11.045.000	1,082,956	9,680,000	968,933
	2,488,800	260,829	2,303,300	237,205
	11,909,600	1,408,922	15,096,700	1,699,525
	8,780,700	1,570,617	7,573,960	1,455,026
	<u> </u>			
	100,530,000	£14,104,412	105,957,100	£14,466,625
s: pol	24,953,900	£6,741,946	25,852,700	£6,927,261
	29,477,100	2,940,660	33,515,000	3,269,706
	548,300	87,585	410,700	70,623
	396,900	28,251	718,600	53,579
	11 00F 400	0.101.000	0.001.000	1 050 000
	11,607,400	2,131,938	9,921,900	1,873,829
	21,844,700	1,550,074	23,544,000	1,624,575
	4,162,000	272,749	3,521,100	244,378
	7,538,800	351,209	8,473,100	402,674
<i>.</i>	100,530,000	£14,104,412	105,957,100	£14,466,625
. <b></b>	100,000,000	JU14,104,412	100,804,100	J. 14, 400,040

By "woolen tissues" carded woolen fabrics, heavy or light, broad or narrow, are meant. There is a wide distribution of these British woolen fabrics all over the world, Germany, Holland, Belgium, and France taking considerable quantities, and still larger exports going out to Canada, Australia, the British East Indies, China, Japan, and South America. It is significant that the United States of late years has been buying less of these carded woolen British fabrics than Argentina, Turkey, Chile or New Zealand. Yet the British

earded woolen export trade as an entirety is an important one, representing 100,000,000 or more yards and a value of upwards of \$70,000,000. It will be observed that in amount, though not in value, of both heavy and light woolens, the "mixed" goods markedly predominate.

Worsted Tissues.

	19	12.	1913.	
	Yards.	Value.	Yards.	Value.
a				
en	303,200	£37,594	398,900	£44,668
v	183,400	20,371	160,700	21,051
	322,700	38,878	141,100	21.366
	1,371,200	334,277	1,764,200	490.529
	689,300	42,000	375,400	26,356
	1,120,700	92,264	1,177,900	104,456
	1,438,900	163,055	1,417,000	181,129
	77,800	6,176	69,600	4,644
	193,100	18,528	154,000	16,152
	1,803,400	164,688	1,490,800	149,587
	222,710	33,458	201,100	20,904
	2,803,000	159,114	1,519,100	119,929
	705,600	107,802	494,100	70,897
Kong	6,380,000	359,477	4,977,300	276,303
Kong	3,189,300	274,753	3,233,400	319,531
	10,022,500	556.054	9,218,400	538,860
	383,900	43.597	235,700	30,427
· · · · · · · · · · · · · · · · · · ·	292,500	26,967		30,427 27,224
			295,100	
	1,850,900	234,366	1,553,600	212,569
	1,019,000	135,710	724,200	92,266
• • • • • • • • •	653,800	62,098	684,100	56,243
	3,567,600	415,063	4,474,400	512,063
	1,798,300	176,807	1,695,200	175,110
	4,108,000	337,567	5,463,200	399,700
	5,798,200	647,323	6,220,900	728,517
<b></b>	1,188,200	107,714	1,325,500	144,654
	15,947,000	1,673,548	9,222,200	1,037,433
	4,701,400	444,353	3,824,900	395,811
	72,136,200	£6,713,602	62,511,900	£6,187,789
ll wool	15,049,100	£3,129,910	13,590,100	$\pm 2,915,485$
	8,752,500	955,271	7,810,000	914,341
ool	365,600	62,855	370,000	62,042
1	614,800	38,650	466,300	36,662
ol	7,405,300	458,044	5,982,300	405,727
	39,948,900	2,068,872	34,293,200	1,853,532
	72,136,200	£6,713,602	62,511,900	£6,187,789

British exports of worsted fabrics to all the world are onefourth smaller in amount and one-half less in value than British exports of earded woolen goods. But the United States takes from British mills many more worsted than carded woolen fabrics — more than four times as many yards in 1912 and 1913, according to these British records. In worsted coatings the all-wool exports from Great Britain to this country predominate, but in stuffs—that is, dress goods and similar fabrics—the mixed or cotton-warp fabrics make up the bulk of American purchases from British mills. Next only after Canada, whose native wool manufacture is rapidly declining, the United States has been, even under previous protective tariffs, the largest foreign market for British worsted goods—Schedule K proving in effect anything but "prohibitive."

Carpets and Rugs.

	1912.		1913.		Total Value by Countries.	
	Sq. Yds.	Value.	Sq. Yds.	Value.	1912.	1913.
Russia					£488,843 232,416	£458,43 238,95
Vorway					194,298	212,11
Denmark	122,400	£37,982	91,200	£27,853	368,762 6,560,389	347,61 6,364,91
Vetherlands	339,100	60,161	402,300	72,544	730,234	745,51
Belgium	68,900 71,000	11,009 18,455	55,200 63,700	9,858 17,757	830,655 1,998,419	956,39 1,948,04
Portugal					31,743	33,83
Spain	71,300	16,569	47,300	8,198	106,343 483,500	103,64 491,50
Freece					148,771	226,17
'urkey					496,101 195,621	365,65 $138,26$
hina and Hong						
Kong apan					1,010,026 792,899	804,09 1,091,0-
nited States	142,000	55,694	137,300	60,688	1,069,240	1,091,3
lexico	· · · · ·				130,648 147,561	101,43 152,18
hile	419,400	54,809	338,700	50,938	681,169	669,47
razil					405,524 171,082	383,70 176,63
rgentina	391,500	72,879	409,000	72,027	1,347,119	1,630,20
ritish S. Africa .					379,640 842,291	387,73 $1,111,53$
ustralia	1,704,700	296,664	1,821,300	334,137	2,026,943	2,031,58
Vew Zealand	555,400 2,730,300	89,972 $450,119$	521,500 2,569,300	91,110 $449,101$	458,515 3,532,589	472,96 $3,186,05$
ther countries	2,194,900	341,277	2,146,100	342,718	3,701,476	3,466,67
Total	8,811,800	£1,505,530	8,602,900	£1,536,924	£25,979,092	£26,084,86

In carpets and rugs the United States, considering its population, is a significantly small patron of British floor coverings, taking less, in fact, than such countries as Chile, Argentina and New Zealand, to say nothing of Australia and

Canada. There was a time — but it was long ago — when British-made carpets commanded a prestige here.

## Manufactures not Specified by Countries.

	1912.		1913.	
	Quantity.	Value.	Quantity.	Value.
Woolen rags:				
Not pulled, tons	3,427	£188,319	4,155	£222,920
Pulled (shoddy or mungo), pounds	13,442,500	393,114	13,465,300	418,435
Waste, pounds	12,159,800	652,574	13,833,800	808,893
Flocks, pounds	849,900	7,483	495,300	5,562
Noils and carded, combed or carbonized	,	,		,
wool, pounds	19,567,500	1,223,747	20,035,100	1,370,538
Tops, pounds	44,826,100	3,476,490	43,624,100	3,651,799
Woolen yarn, pounds	6,246,500	585,975	4,809,900	467,698
Yarn, hair or wool, pounds	9,369,100	400,352	8,477,000	408,458
Traveling rugs, etc., square yards	2,102,000	212,560	2,032,800	202,065
Flannels and delaines, yards	7,567,900	286,042	7,719,100	305,500
Damasks and other furniture stuffs, etc.,				
yards	118,600	15,569	108,500	18,901
Plushes, wool and mohair, yards	386,400	85,659	386,000	92,398
Blankets, pairs	1,124,259	524,071	1,004,787	497,281
Hosiery, wool or mixed:	, ,			
Stockings, etc., dozen pairs	2,183,600	1,928,356	2,364,485	1,968,286
Small wares, and other, not specified		688,163		711,660
Total		£10,668,474		£11,150,39

In comparison with the enormous British production, British exports of shoddy or mungo are relatively meager, most of these materials being worked into goods at home. But an export of 44,826,100 pounds of tops points to an extensive business of this kind—forecasting, doubtless, a valuable trade, under the reduced tariff, with the United States.

## EXPORTS OF BRITISH MANUFACTURES OF WOOL, CALENDAR YEARS 1912 AND 1913.

## Recapitulation.

	1912.		1913.	
	Total Quantities.	Total Values.	Total Quantities.	Total Values.
PARTLY MANUFACTURED:				
Woolen rags, etc.:			1	
Not pulled, tons	3,427	£188,319	4.155	£222,920
Pulled (shoddy and mungo), pounds,		393,114	13,465,300	418,435
Waste, pounds	12,159,800	652,574	13,833,800	808,893
Flocks, pounds	849,900	7,483	495,300	5,562
Noils, and carded, combed or carbon-	049,500	1,400	450,500	0,00.
ized wool, pounds	19,567,500	1,223,747	20,035,000	1,370,538
Tops, pounds	44,826,100	3,476,490	43,624,100	3,651,799
YARNS:	44,020,100	5,410,420	40,024,100	0,001,100
Woolen, not specified, pounds	6,246,500	585,975	4,809,900	467,698
Worsted, by countries, pounds	56,779,100	5,313,394	49,917,600	4,994,099
Alpaca, mohair and cashmere, by coun-	00,110,100	0,010,004	40,011,000	1,001,000
tries, pounds	15,494,200	1,925,846	17,221,400	2,171,736
Of hair and wool, not specified, pounds,		400,352	8,477,000	408,458
FABRICS:	0,000,100	100,002	0,11,1,000	100,100
Woolen tissues, by countries, yards	100,530,000	14,104,412	105,957,100	14,466,625
Flannels and delaines, yards	7,567,900	286,042	7,719,100	305,500
Blankets, pairs	1,124,259	524,071	1,004,787	497,281
Worsted tissues, by countries, yards,	72,136,200	6,713,602	62,511,900	6,187,789
Carpets and rugs, by countries, square	1 ,2,100,200	0,110,002	02,011,000	0,101,101
vards	8,811,800	1,505,530	8,602,900	1,536,924
Traveling rugs, etc., square yards	2,102,000	212,560	2,032,800	202,065
Plushes, wool and mobair, vards	386,400	85,659	386,000	92,398
Damasks and furniture stuffs, yards .	118,600	15,569	108,500	18,901
Hosiery, Wool or Mixed:	1.0,000	10,000	230,000	10,000
Stockings, etc., dozen pairs	2,183,600	1,928,356	2,364,485	1,968,286
All other, small wares, etc	2,100,000	688,163		711,660
Total all manufactures		£40,231,258		£40,507,56

An export trade of woolen manufactures, amounting to nearly \$200,000,000 annually, shows how securely British fabrics are entrenched in all the markets of the world. Can American-made woolen fabrics secure a foothold in South America or the Orient? The result of the effort of President Wood and his associates will be watched with intentness on both sides of the Atlantic Ocean.

## ACTIVE AND IDLE MACHINERY.

COMPARATIVE RETURNS FOR THE INDUSTRY ON DECEMBER 1, 1913. AND MARCH 2, 1914.

Returns of active and idle woolen machinery in the United States on March 2, 1914, received in response to our quarterly inquiry, show on the whole a somewhat better condition than was manifest in the returns for the first inquiry on December 1, 1913. As in the earlier case, a very great majority of all the woolen machinery of the country was represented in the figures sent to the Association. It is believed that the returns give a reasonably accurate idea of the condition of the entire industry. It cannot be denied that a large and indeed abnormal amount of machinery is still unemployed, and that while there has been some improvement since December, the general state of business is still as a whole unsatisfactory, though some fortunate mills are in full operation.

It should be emphasized again that these returns as made by the mills do not disclose in any case the state of the business of any particular concern. The blanks for the returns are distributed without any number or other distinguishing mark. No signature is required, and instead of making a complete statement on one blank, the figures for any mill can be divided, reported on two or more blanks and separately forwarded to the office of the Association. There is no possible way in which these returns can be identified as belonging to any especial mill, and there is no need that they should be thus identified.

We would ask manufacturers once more not to give the percentage of their machinery employed and idle, as the report cannot be utilized in that form, but to state the number of looms, spindles, cards or combs. The percentage figures are made up in the office of the Association when all the returns are received and compiled. Our inquiries are sent to all of the woolen mills in the United States — to those without as well as to those within the Association — and the complete

final figures showing the amount of machinery idle and active are sent to all of the woolen mills of the United States and to others interested in the industry.

The response to both quarterly returns has been very encouraging to the officers of the Association, who renew their hope, expressed in the January Bulletin, that "the information resulting will prove to be of as much practical value to those engaged in the woolen manufacture as statements of bank clearings and money reserves are to bankers or as data relative to freight tonnage, gross earnings, and idle cars are to railway managers." Another inquiry will be undertaken for June 1. The results of the inquiry as to machinery active and idle on March 2, 1914, are as follows:

MACHINERY.	Total Num- ber Reported.	In Operation.	Idle.	Per Cent of Idle to Total	
		Mar. 2, 1914.		Mar. 2, 1914.	Dec. 1, 1913
Looms, wider than					
50 in reed space, Looms, 50 in reed	40,105	30,155	9,950	24.8	24.9
space, or less	12,099	9,955	2,144	17.7	27.2
Looms, carpet Woolen cards,	2,996	2,262	734	24.5	32.1
sets	3,156	2,542	614	19.5	21.4
Worsted combs . Woolen spinning	1,691	1,472	219	13.	23,1
spindles Worsted spinning	1,032,447	803,366	229,081	22.2	22.7
spindles	1,540,808	1,202,433	338,375	22.	26.

## ADAM SMITH, THE REAL.

A PHILOSOPHER DREAMING AND WAKING, FREE TRADER
AND PROTECTIONIST.

By ROLAND RINGWALT.

"Unknown and yet well known" might almost be transposed. After Shakespeare there is no name in English letters better known than that of Adam Smith, and yet thousands of intelligent men only know his name. In hundreds of libraries the "Wealth of Nations" stands because it would be poor taste to omit it — few read the book, and those who do notice that later editions, notably free trade ones, modify and even nullify a large part of the text.

We scarcely exaggerate in saying that Adam Smith is honored and forgotten, his masterpiece on "Moral Sentiments" is still a delight, but the "Wealth of Nations" is not current. Any one who opens it will find much to admire, he will probably read on as long as he has time, then he will drop the book, and perhaps not take it up again for a year. Nevertheless it suits free trade editors and professors to refer to "the mighty name of Adam Smith."

Yes, and his is a mighty name. The old castle is something to gaze upon even though a modern building with elevator and telephone is more business-like. With all that is obsolete, with all that is erroneous in Adam Smith, every page tells of knowledge, thought, and feeling. He was a great man, a philosopher and a philanthropist, and the more we know of him the better fitted we are for economic studies. The ideal so close to his heart of establishing free trade between the nations of the earth merely brings out in stronger light his noble candor in seeing what obstacles must be removed. We have no right to say that because he was in love with an ideal he was a mere visionary, for many a hardheaded, practical man has some mental darling, precious, even adorable in his sight, although his darling scarcely attains to a local habitation and a name.

No man in the world was more averse to war than Grant,

the kindly soldier who said "Let us have peace," the mereiful conqueror who sent Lee's horses to the Southern pastures instead of keeping them as spoils. Grant had no relish for triumphal parade. While in Europe he avoided military displays; he was a plain lover of peace. Yet the necessity of drill and discipline was recognized by Grant as plainly as by any other President. He looked on the army as destined to last for many years, and on his deathbed he asked a West Point eadetship for his grandson. Abstractly he wished to see peace and lasting peace, concretely he looked on military force as essential to the existence of government and on war as a dread possibility.

Adam Smith, the first of free trade authorities (and there is no second), seems to have dreamed of free trade, and to have recognized the facts that make for protection. It is a flash of humor in the dismal science of political economy that he of all men should have pointed out the advantages of domestic trade over foreign trade. He never wrote badly — few ever wrote so well. In his wonderful century, with Dryden passing off at the beginning, with Blackstone and Butler, with Goldsmith and Gibbon, Johnson and Burke, with Coleridge and Scott toward the end, who is there who ean match Adam Smith? As clear as Swift, without his coarseness, nearing Berkeley in beauty, and yet never incomprehensible, the great Scotchman hoped for unrestricted trade as a thing that might be, but recognized the every day common sense advantage of a home market. He knew that it was well for an English village that the weaver should be well paid, that a year of rents met on the term day, of good wages in the shops, of fair profit for the butcher and the cheesemonger was a year long to be cherished in the minds of the old gossips.

To the ocean Adam Smith looked with poetic eye. Sundry results, noble and striking ones might accrue from a free trade policy; but one great result had followed in the train of the Navigation Act. A world-wide merchant marine had grown up, British vessels were in a thousand ports, British money was earning interest, British sailors were in the rigging and on the deck. The Navigation Act was not such a

measure as Smith the dreamer might have framed, yet Smith woke and beheld the marvellous fleet that made England great in peace and could furnish seamen in time of war. It is gall and wormwood to free traders to read Adam Smith's comment on the most effective of all protectionist laws, "the Navigation Act is perhaps the wisest of all the commercial regulations of England." There spoke the man who saw the tossing waves and the British flag that rode upon them.

Smith while an infant was carried off by gypsies, but was soon brought home again. It is not disrespectful to see in this a forecast of later years, wherein his fancy rambled among the things he would like to see, although his second thought returned to facts which few ever saw more clearly. Once the writer heard an imaginative woman say, "My ideal is a community in which all will love right for its own sake, without dreading law on earth or retribution after this life ends. But when I look at humanity as I find it, I am sure that if no one was afraid of a policeman and no one feared the day of judgment society could not outlast the night." Was there not homely wisdom in her words?

By all means let us admit that Adam Smith was the philosopher and author who made economics fascinating. There is no doubt that his sentimental bias was toward free trade, that he looked on tariff barriers as undesirable restraints on the commerce that may sometime flow unvexed from port to port. Nevertheless protectionists should remember that Adam Smith better than any who have succeeded him has stated the argument for domestic trade on land and for safeguarding shipping at sea.

## Obituary.

#### EBEN S. DRAPER.

Hon. Eben Sumner Draper, ex-Governor of Massachusetts, died in Greenville, S.C., Thursday, April 9, 1914, having sustained a shock of paralysis on his way North after a visit to the far South in search of health. The death of Governor Draper in the height of his remarkable business career came as a severe blow to the manufacturers and others with whom he had been for so many years associated.

He was a native of Hopedale, Mass., born on June 17, 1858, the third and youngest son of George and Hannah B. (Thwing) Draper. He was educated in the public schools of Hopedale, in Allen's School at West Newton, Mass., and in the class of 1880 of the Massachusetts Institute of Technology. was the desire of his father, George Draper, that the young man should be thoroughly equipped for participation in the management of the Draper Company, whose plant for the manufacture of cotton machinery is the largest in the world. After leaving the Institute of Technology, Eben Draper passed three years of apprenticeship in the works at Hopedale, and also in the machinery building establishments at Lowell and Manchester. Subsequently he was admitted into the firm of George Draper & Sons, and with his father assisted in founding the Home Market Club of Boston, the great protectionist organization of New England.

Like his father and his older brothers, General William F. and George A. Draper, Eben Draper was a strong upholder of the protective system. He served as the chairman of the Congressional committee which wrested the Hopedale district from the Democracy, and sent General Draper as a protectionist to the House of Representatives in Washington. The zeal and executive force which Eben Draper displayed led to his election as chairman of the Republican State Committee, where he served most acceptably in several victorious campaigns. He was chosen as chairman of the Massachusetts Republican delegation to the St. Louis Convention of 1896, which nominated William McKinley for the Presidency. In that memorable gathering

Eben Draper bore a conspicuous part in the vital work of committing the Republican party unequivocally to the gold standard.

Four years later, when President McKinley was reëlected, Mr. Draper was a Presidential elector. He had gained a high place in the counsels of the protectionist party, and he was nominated and elected Lieutenant-Governor of Massachusetts in 1905, and reëlected in 1906 and 1907. In the following year he was elected Governor of Massachusetts and was reëlected in 1909.

Governor Draper manifested in his high office the alert and genuinely progressive spirit which won such notable success in business affairs. He showed courage in the vetoing of several important measures which he regarded as unwise, and he did his part in extending those thoroughgoing business methods for which the State Administration of Massachusetts has long been distinguished.

Governor Draper's generosities in and out of official position were many. As president of the Massachusetts Volunteer Aid Association under Governor Wolcott he purchased and equipped the hospital ship "Bay State" in the Spanish War, at a cost of \$200,000. This association, under his leadership, raised altogether more than \$400,000 for the care of Massachusetts soldiers and sailors in the campaigns of Cuba and the Philippines. He was appointed by his friend Governor Guild as the chairman of the Massachusetts Relief Committee at the time of the San Francisco earthquake and fire—a committee which raised a million dollars—and he was active also in the work of relief at the time of the earthquake in Messina. He gave to Milford the beautiful Milford Hospital.

Governor Draper was not only engaged in the management of the Draper Company, but was also interested in the Hopedale Machine Company, the Dutcher-Temple Company, the Hopedale Screw Machine Company, the Globe Yarn Mills, the Continental Mills, the Glasgow Thread Company, the Queen City Cotton Company, and the Sawyer Spindle Company. He was vice-president of the Manville Company and the Massachusetts Hospital Life Insurance Company, and director of the Shawmut National Bank of Boston and the Milford National Bank. He was also a member of the corporation of the Massachusetts Institute of Technology. Together with his father and his brothers he brought about the beautifying of Hopedale, making it a model town with its fine streets and attractive cottages.

A Unitarian in religious faith, Governor Draper was an active

working force in that denomination in Massachusetts. He was a member of the Society of Colonial Wars, the Somerset, Algonquin, Union, Middlesex, and Massachusetts Clubs of Boston, the Metropolitan Club of New York, and the Hope Club of Providence. He was married in 1883 to Miss Nannie Bristow, the daughter of General Benjamin F. Bristow, former Secretary of the Treasury. Mrs. Draper died last year. There are three children, B. H. Bristow, Eben S., Jr., and Dorothy (Mrs Thomas B. Gannett, Jr.).

## CHARLES F. FAIRBANKS.

Mr. Charles F. Fairbanks, the treasurer and executive head of the Bigelow Carpet Company, the second largest carpet manufacturing concern in the United States, died at his home in Milton, Mass., on March 8, 1914. He had for some time been in ill health, and his death, which followed soon after a serious operation, was not unexpected. Mr. Fairbanks was the son of Henry P. Fairbanks, an associate with Erastus B. and Horatio N. Bigelow in the founding of the Bigelow Carpet Company, and was born in Charlestown, Mass., September 25, 1843. At the age of twenty-four he entered the Boston office of the Bigelow Carpet Company as a clerk, under Mr. Charles A. Whiting, then the treasurer. In the year 1874 Mr. Fairbanks succeeded Mr. Whiting as treasurer, and had, therefore, held that position forty years. His responsibilities were increased in 1900 when the Bigelow Carpet Company took over the Lowell Manufacturing Company.

Thoroughly familiar with the manufacturing business, Mr. Fairbanks was a sagacious merchant and manager. He had seen the industry and his own company's share of it grow from small to great proportions. In New England he was long the most conspicuous figure in his trade, and he enjoyed to a remarkable degree the respect and confidence of the business community. Besides his connection with the Bigelow Carpet Company Mr. Fairbanks was also the treasurer of the Clinton Wire Cloth Company, a concern whose works, with those of the Bigelow Carpet Company, make up the larger part of the productive industries of the thriving town of Clinton, Mass.

Mr. Fairbanks was for many years an active member of the National Association of Wool Manufacturers, serving on its Executive Committee and as chairman of its Finance Committee. He was always a consistent protectionist, and was frequently called to Washington to give testimony before the committees of Congress on tariff matters; especially on questions affecting the interests of the American carpet manufacturers, whose spokesman he usually was.

Other business affiliations of Mr. Fairbanks were as a director and formerly a vice-president of the Second National Bank of Boston, a trustee of the Warren Institution for Savings of Boston, and a director of the American Mutual Liability Insurance Company, the Arkwright Fire Insurance Company, the Mutual Boiler Insurance Company, the Boston Safe Deposit & Trust Company, the Boston Storage Warehouse Company, the Charlestown Gas & Electric Company, the Hamilton Woolen Company, the Spencer Wire Company, the New England Brick Company, and the New England Brick Yards Company.

Mr. Fairbanks married on December 2, 1869, Julia E. Missroon. Mrs. Fairbanks survives him, with four children, Henry Parker Fairbanks, agent of the Bigelow Carpet Company, with head-quarters in New York; Charles F. Fairbanks, Jr., treasurer of the Clinton Wire Cloth Company; Julia M. and Stephen, who are still at home.

A great gathering of friends and a company of employees from the mills in Clinton and Lowell and from the offices attended the funeral of Mr. Fairbanks in Emmanuel Church, Boston, at noon, March 12. During the funeral hour every mill in Clinton ceased operations, stores were closed and the church bells tolled, in evidence of the regard and affection of the people for the able and honorable man who had been for so many years the head of the great industries of the community.

#### EDWIN MILNER.

Mr. Edwin Milner, of Moosup, Conn., long an active and successful woolen manufacturer, but of late years retired from business, died on Thursday, February 19, 1914, at the age of seventy-one. Mr. Milner was a native of England, but had lived since early boyhood in this country. He was engaged in the woolen industry successively at Montville, Old Lyme, and Plainville, all in Connecticut, becoming superintendent of a mill at Montville when he was twenty-one years old, in 1863. It was in 1880 that he began his business in Moosup, and he continued to manufacture until his plant was purchased by the American



(E) Sauroums

Woolen Company, and made one of the constituents of the great corporation.

Mr. Milner then, in 1899, retired from active business, but he was interested in the New York, New Haven & Hartford Railroad, and was for some time a director of the road. In politics Mr. Milner was an earnest Republican. He sat in the Connecticut House of Representatives in 1887 and 1891, and in the Connecticut Senate in 1893, and he had been a delegate to many Republican national conventions. In 1897 Mr. Milner established a scholarship at Yale for students from Windham County. He had been in ill health for about a year previous to his death.

## CHARLES PORTER.

Mr. Charles Porter, a wool manufacturer of Philadelphia, known for his active interest in the broad welfare of the industry, died in the prime of life on Saturday, March 14, 1914, after a brief illness with pneumonia. Mr. Porter was born forty-six years ago, the son of Charles Porter, Sr., who, coming from Ireland to this country in 1840, had become associated first with his uncle, William Porter, of Philadelphia, and later with Alexander Ervin. The elder Porter, in 1850, established himself as a manufacturer on his own account, and subsequently forming a partnership with John Dickey, under the title of Porter & Dickey, he operated the Park Mills, the partnership continuing until the retirement of Mr. Dickey in 1899. At that time the son, Charles Porter, Jr., entered the firm, and relieved his father of the more burdensome responsibilities. The business of Charles Porter & Son was carried on until 1913, when it was discontinued, Mr. Porter, Sr., dying on December 21 of that year.

His son, who survived him but a short time, was prominent in the organization of the Cloth Manufacturers Association of Philadelphia, of which he was long president, and afterwards in the organization, with Philadelphia friends, of the American Association of Woolen and Worsted Manufacturers. Mr. Porter was first the secretary of the American Association and then the president, declining a third term in the presidency at the time of his retirement from business.

His friends and associates bore a high regard for Mr. Porter as an affable and gracious gentleman. He was affiliated with the Presbyterian Church, and was a member of the Masonic Order, the Manufacturers Club, the Philadelphia Country Club, and the Racquet Club. A mother and three sisters survive him.

## CYRIL JOHNSON.

MR. CYRIL JOHNSON, one of the oldest of New England wool manufacturers, died on March 27, 1914, at his home in Stafford Hollow, Conn., in his eighty-third year. Mr. Johnson had spent his entire lifetime in the woolen industry. Born on a farm in West Stafford, he entered a woolen mill in Staffordville as a lad of sixteen. He soon acquired a thorough knowledge of every department of the business, and in 1870 became superintendent and one of the owners of the Phenix Mill. Eleven years later. in 1881, he joined with others in organizing the Riverside Mill, of which he became agent and treasurer, and in 1888 he took part in the organization of the Central Woolen Company. Johnson was also the president of the First National Bank. He was an enterprising and sagacious man of business, and was interested in many enterprises in and out of Stafford and its vicinity.

Mr. Johnson was married on May 21, 1857, to Miss Julia C. Pinney, who survives him, as do a brother, William Johnson, of Hampton, and two sisters, Mrs. Mary Pinney and Mrs. Henrietta Smith, both of Stafford Springs. The funeral of Mr. Johnson at the Congregational Church in Stafford Springs on Monday, March 30, was attended by a large number of wool manufacturers and other business friends and associates.

## Editorial and Endustrial Miscellany.

## IMPORTS UNDER THE NEW TARIFF.

A VERY GREAT INCREASE IN THE RECEIPTS OF BOTH MATERIALS AND MANUFACTURES, AS WAS ANTICIPATED.

IMPORTS of wool and of manufactures of wool for the months of January and February, 1914, under the new Simmons-Underwood tariff show, of course, a marked increase in the entrance of these articles into the United States. It is possible that the most sanguine anticipations of European manufacturers and merchants have not yet been fully realized, but the imports for the two months for which complete official figures are made up indicate the beginning of a serious pressure from abroad on American mills. Foreign manufacturers were unusually busy prior to and during the active consideration of the new tariff law in Washington. They were not driven by any very powerful motive to avail themselves of the American market, or even to make plans for any such invasion. Though business abroad is not quite so active in the woolen and allied industries as it has been for several years, yet the volume of imports in the two months of January and February — the first under the new tariff rates — was certainly substantial, and it is not surprising that managers of foreign mills should now be manifesting a wellaroused interest in the commercial possibilities of America.

A tabular statement of the increased imports in wool and goods for January and February last, as compared with the corresponding months of the year 1913, will be found on pages 195 and 196.

In January, 1914, the total imports of raw wool, mohair, and alpaca were 24,465,640 pounds, valued at \$5,219,138, as compared with total imports of 19,341,606 pounds, valued at \$3,545,669, in January of 1913—an increase, measured in value, of 47 per cent. The total imports of manufactures of wool, including carpets, dress goods, cloths, wearing apparel, etc., were valued at \$4,664,349, as compared with \$1,468,228 in January, 1913—an increase, measured in value, of 218 per cent. It will be observed, therefore, that the new tariff has facilitated the importation of

manufactured woolen goods vastly more than the importation of the crude materials. This is not an economic advantage; on the contrary, it is an economic reverse.

The same general condition holds true also of the succeeding month of February. In this month of 1914 our total imports of wool, mohair, alpaca, etc., were 31,080,890 pounds, valued at \$6,862,384, as compared with 18,356,522 pounds, valued at \$3,651,823, in February, 1913 — an increase in value of 88 per cent. In February, 1914, our total imports of manufactures of wool, including carpets, cloths, dress goods, wearing apparel. etc., were valued at \$3,795,442, as compared with \$1,352,542 in February, 1913—an increase of 180 per cent. While the imports of raw wool, etc., were relatively larger in February than in January, our imports of manufactures still show much the greater expansion — just as might have been expected. The cheapness of labor on the other side of the Atlantic makes it expedient to manufacture there as much of the crude materials It is therefore as a general proposition more profitable for the foreigners to send to us wool in the form of goods than wool in the crude state of untouched materials for manufacture.

For the two months the value of wool imported amounted to \$7,197,492 in 1913, and to \$12,111,552 in 1914, showing an increase of 68 per cent. The value of imported wool manufactures for the corresponding periods was \$8,463,791 in 1914 and \$2,820,770 in the preceding year. The increase was 193 per cent.

It is probable that our importations of wool manufactures will go on for a while at least at an accelerating ratio. The authors of the Simmons-Underwood tariff when it was presented in the House of Representatives estimated that the imports of wool manufactures under its provisions would be about \$63,000,000 a year. This was based upon a 15 per cent wool duty and a 40–45 per cent duty on cloths and dress goods, and the prospect is that this prophecy will be fulfilled.

Can from \$50,000,000 to \$70,000,000 worth of foreign wool manufactures be bought and consumed in the American market without gravely impairing the business of many American mills? There is no need for conjecture upon this point; it is in a fair way toward actual and exact determination.

	JANUARY.					
ARTICLES.	19	13.	1914.			
	Quantity.	Value.	Quantity.	Value.		
Wool, hair of the camel, goat, alpaca, and other like animals, and manufactures of:  Unmanufactured —  Class 1 — Clothinglbsdut  Class 2 — Combinglbsdut	7,052,454 1,452,238	\$1,569,547 395,346				
Class 3 — Carpet	10,836,914	1,580,776				
Total	19,341,606	\$3,545,669				
Wool of the sheep, hair of the camel and other like animals — Class I — Clothing 1 lbs free Class 2 — Combing 1 lbs free Class 3 — Carpet 1 lbs free			14,217,699 2,047,118 7,846,187	\$3,282,289 496,092 1,387,561		
Totallbs			24,111,004	\$5,115,942		
Hair of the angora goat, alpaca, aud other like animals 2lbsdut			354,636	\$103,196		
Total unmanufacturedlbs	19,341,606	\$3,545,669	24,465,640	\$5,219,138		
Manufactures of — Carpets and carpeting, sq. ydsdut Clothslbsdut Dress goods, women's and children's	66,610 504,360 1,650,516	\$300,426 625,981 345,402	96,091 1,723,987 1,151,928	\$363,814 1,962,233		
Press cloths of camel's hair for oil milling purposes s. free. Wearing apparel. dut Wool wastes s. lbs. free. All other. dut. lisir of the angora goat, alpaca, etc., manufactures of dut		92,126	802,091	25,564 213,003 129,058 542,968 210,428		
Total manufactures of		\$1,468,228		\$4,664,349		

<sup>&</sup>lt;sup>1</sup> Wool free Dec. I, 1913.

<sup>&</sup>lt;sup>2</sup> Entered as wool of Class II. previous to Dec. 1, 1913.

<sup>&</sup>lt;sup>3</sup> Free after Dec. 1, 1913.

<sup>4</sup> Classified as manufactures of wool before Jan. 1, 1914.

	FEBRUARY.					
ARTICLES.	19	13.	1914.			
	Quantity.	Value.	Quantity.	Value.		
Wool, hair of the camel, goat, alpaca, and other like animals, and manu- factures of: Unmanufactured — Wool of the sheep, hair of the camel						
and other like animals — Class 1 — Clothing 1lbsfree Class 2 — Combing 1lbsfree Class 3 — Carpet 1lbsfree Hair of the angora goat, alpaca, and	8,772,444 926,425 8,657,653	\$2,192,326 248,278 1,211,219	18,404,021 2,733,720 9,643,028	\$4,398,235 690,195 1,687,964		
other like animals 2lbsdut	Included	above.	300,121	85,990		
Total unmanufacturedlbs	18,356,522	\$3,651,823	31,080,890	\$6,862,384		
Manufactures of — Carpets and carpeting,	95,355 385,006	\$425,414 464,742	105,482 1,421,385	\$410,887 1,564,197		
Dress goods, women's and children's	51,058,021	262,938	774,924	782,121		
milling purposes 3         free.           Wearing apparel         dut.           Wool wastes 3         lbs. free.           All other         dut.		85,501	1,076,814	4,493 142,553 175,872 484,450		
Hair of the angora goat, alpaca, etc., manufactures of 4dut				230,86		
Total manufactures of		\$1,352,542		\$3,795,445		

<sup>&</sup>lt;sup>1</sup> Wool free Dec. 1, 1913.

### AN IMPORTANT CHANGE.

THE ANNUAL WOOL ESTIMATES TRANSFERRED FROM THE NATIONAL ASSOCIATION TO THE GOVERNMENT.

Several months ago, at the suggestion of Mr. John P. Wood, President, the Executive Committee of the National Association of Wool Manufacturers voted to request the Department of Agriculture at Washington to assume the task of preparing annual estimates of the production of wool and mohair in the United States, a task which had been performed for a quarter of a century by this Association. The question was brought at once to the attention of Hon. David F. Houston, the Secretary of Agriculture, in a letter in which it was stated that for twenty-

<sup>&</sup>lt;sup>2</sup> Entered as wool of Class II. previous to Dec. 1, 1913.

<sup>3</sup> Free after Dec. 1, 1913.

<sup>4</sup> Classified as manufactures of wool before Jan. 1, 1914.

<sup>5</sup> Square yards.

five years the National Association had prepared an annual report of the wool product of this country, and had presented with it the best available facts and figures as to the wool product of other countries. "The Department of Agriculture," it was added, "has done us the honor from time to time to publish the main facts and figures of our investigations, with due credit to the Association, and it has been a cause of gratification to us that whenever the Bureau of the Census has made its enumeration of the number of sheep in the United States the total figures of the Bureau have come very near our own."

The communication to Secretary Houston further said: the constantly broadening work of the Department of Agriculture it has come to seem to our manufacturers that the Department itself, with the great weight of its official authority behind it, might advantageously undertake annually a work very like that which we have done — a work that the Department actually performs every year in regard to the cotton production of the country. The wool production also is a factor of great value. Wool, instead of being confined to one section of the country, is produced in greater or smaller amounts in all our States. The industry is genuinely national, and if the annual figures of its product in the nation at large and State by State could be gathered and published by the Department it would be appreciated, not only by the wool growers themselves, who now number some 600,000, but by the merchants dealing in wool and by the manufacturers of woolen goods. Your organization is now so large that it would seem that the work might be undertaken and performed without any very greatly increased expense to the Department. Will you not kindly consider the matter and give us as early a reply as possible whether the task is one that can be taken up by the government?"

In reply Secretary Houston explained that "The Department of Agriculture has not attempted to estimate the annual production of wool, largely because such work has been well handled by your Association. If it is your intention to discontinue such work, or if it is your desire that the work be transferred to this Department, the subject will be carefully considered by the Bureau of Statistics and the Division of Animal Husbandry of the Bureau of Animal Industry of this Department."

After due consideration by the officials of the Department of Agriculture and several personal conferences with representatives of the Department, Secretary Houston has now announced his willingness to assume the task of preparing the annual wool estimates as a part of the regular work of the Department of Agriculture, and officials of the Bureau of Statistics of the Department will soon be in conference with the office of the Association to arrange the details of the transfer of the service to the government.

It is the hope of the Department to make, through its elaborate organization, a complete estimate of the wool production of the United States and of the several States every year, and also to present periodically data relating to stocks of wool on hand at the principal points of accumulation. We earnestly invoke for the Department the hearty coöperation of wool manufacturers, wool merchants, and wool growers throughout the country who, in a similar work, have so loyally assisted the National Association of Wool Manufacturers.

The Federal Department of Agriculture has the machinery necessary for the gathering of the wool data on a comprehensive seale. Its reports will bear the stamp of official, impartial authority. The Annual Wool Reviews of the National Association have always been prepared with the utmost care and conscientiousness. and as accepted and published by the Federal government have formed the authoritative basis for discussion in many successive considerations of the subject of wool growing and wool manufacturing by both houses of Congress in Washington. There is no need of assurance that the National Association will maintain an active interest in the welfare of wool growing and will follow the subject with all necessary attention. But it is the mature belief of the officers of the Association that we should from now on devote our main labors to subjects closely connected with the manufacturing industry, leaving to the Department of Agriculture the responsibility for gathering and presenting the figures as to the annual production of wool, just as the Department already provides the data of the annual production of cotton, or makes its estimates of the principal crops of the country.

Therefore the twenty-fifth Annual Wool Review, which was presented in the quarterly Bulletin for January, 1914, will be the last to contain estimates of the American wool products gathered directly under the auspices of this Association. We shall, however, present fully, with appropriate comment, the annual figures of the government, and shall continue to do our utmost to keep

American manufacturers informed as to the status of the wool growing industry of this and other countries. Either through this Association or through the government, all the facts and figures which have usually been presented will continue to be published. It is our sincere hope that the friends and correspondents who have aided us in the compilation of our figures will continue to show the same zealous and helpful spirit toward the officials of the government. The sources of our information, and the methods of securing and compiling that information, will be communicated by us to the Department of Agriculture, with whose officials it has been and will continue to be our endeavor to maintain the frankest and friendliest relations.

### A STRIKING TRIBUTE TO PROTECTION.

# SECRETARY REDFIELD'S OWN PROOF OF AN IMMENSELY EXPANDED COMMERCE.

It is Secretary Redfield's own Department of Commerce that bears signal witness, in its "Annual Review of the Foreign Commerce of the United States," to the steady and extraordinary advancement of the nation industrially under the protective tariff system, which Mr. Redfield and his colleagues are heroically struggling to set forever aside. This "Annual Review" contains a careful analysis of the changing characteristics of our export and import trade from 1880 to the present time. In the year first considered, when the Centennial Exposition at Philadelphia was still a fresh and vivid memory, no less than 84.3 per cent, or more than four-fifths of our total exports, were of agricultural products. At that time there were few men, even among confident protectionists, who expected to see the United States very soon become more than a purveyor of crude foodstuffs and materials for the skilled workers of other lands.

But in the year 1913, the culminating year of a long protective tariff period, agricultural products formed the lesser portion, or only 41.6 per cent, of our exports to countries overseas. Nor is this the entire story. Mere crude, unmanufactured foodstuffs, which constituted, in 1880, 32.3 per cent of our exports, had fallen steadily in their proportion and were in 1912 but 4.6 per cent. A very large wheat crop and abnormal exports of that commodity swelled the percentage of crude foodstuffs to 7.49

per cent in the exports of 1913, but under normal conditions these crude foodstuffs will doubtless again subside to no more than 4 or 5 per cent. On the other hand, such foodstuffs as are partly or wholly manufactured, constituting 25 per cent of our exports on the average between 1880–1900, have significantly fallen off less, or from 24.26 per cent in 1902 to 13.23 per cent in 1913. This decline in partly or wholly manufactured foodstuffs has been due chiefly to the decrease in the available supply of meats, the only point in which our modern agricultural industry has faltered.

This is the record for agriculture in our exports — the record of a country of immense production, but of a country whose manufacturing industries have so wonderfully expanded that their multiplying workers require the keeping of more and more foodstuffs at home. Indeed, the time is not far distant in the judgment of trained observers when the United States will almost cease to export foods at all.

If we had been dependent upon agriculture our export commerce would have shown little of that magic growth which has staggered the logic of old-time economists. The real great gain in our export trade has been in manufactures — either those completely finished and ready for use or in those for further use in manufacturing. Of these two classes the completely finished manufactures are the more important, their proportion in our total of domestic exports rising from 11.26 per cent in 1880 to 31.97 per cent in 1913, and the export of manufactures for further use increasing from 3.52 per cent in 1880 to 16.83 per cent in 1913.

Of course, these figures of greatly enlarged exports of manufactured articles are fatal to the familiar contention that the protective tariff has been a "Chinese wall" around the United States, that, preventing foreign goods from coming in, prevented also, and necessarily, American goods from going out to other countries. Indeed, with two great protectionist nations, Germany and the United States, distancing Great Britain in the ratio of growth of export commerce, this "Chinese wall" must have become a painful subject to those who had been fondest of exploiting it. The figures of the changing characteristics of our export commerce are a vivid record of an industrial diversifying and advancement the like of which the world before has never known. And the significance of all of it is strengthened and

not lessened by the fact that as a rule it is only the overflow or surplus of our manufactured goods that goes abroad — that the great bulk of these goods, fully 90 per cent of them, are kept and consumed at home by what has been until the present the greatest and most prosperous working population in the world. In 1880 our exports of manufactured products were only \$121,000,000; in 1913 they were \$1,185,000,000 — an increase of considerably more than a billion dollars in these thirty-three eventful years.

An economic policy under which such magnificent results as these have been accomplished in export trade, which has commanded relatively little attention in contrast to the energy and enterprise devoted to the great home market, is not easily discredited or overthrown. This may be an inadvertent, but it is certainly a forceful and impressive, tribute which Mr. Redfield's own Department pays to the protective principle as embodied in the economic practice of the United States.

The wonderfully good results of the protectionist policy in stimulating and broadening the production and increasing the profitable exports of the United States are all the more striking because of the contrasting record of the first half year of the new Simmons-Underwood tariff for revenue only. In the first five months of that tariff the imports of raw materials for use in manufacturing fell off to \$253,000,000, as compared with \$280,000,000 in the corresponding months of the year before, and the imports of manufactures partially finished for further use in manufacturing fell off to \$122,500,000, as compared with \$149.500.000. These figures point unmistakably to a lessened activity in American manufacturing business, and a lessened aggressiveness and success in the export trade. The record of these five months under the new tariff policy shows \$295,500,000 worth of finished manufactures exported, as compared with \$315,750,000 in the corresponding months of the preceding year. On the other hand, the imports of manufactures under the new tariff law increased in these five months to \$188,000,000, as compared with \$183,000,000 in the same months of the year preceding.

Secretary Redfield is one of those who have most constantly urged that the new tariff policy would "sharpen the wits" and increase the business of American manufacturing. But in the fifth month of the new tariff experiment the exports of finished

manufactures from this country were but \$51,500,000 in value, as compared with \$62,250,000 in the corresponding month of last year under the Aldrich-Payne law. Even in iron and steel the exports for the first five months of the Simmons-Underwood tariff fell to \$101,000,000, as compared with \$125,000,000 in the same period of the year preceding. Indeed, exports of iron and steel manufactures in January and February last were only \$33,000,000, as compared with \$49,000,000 in January and February of the previous Aldrich-Payne year — a reduction of almost one-third.

Nor can it be urged by Secretary Redfield or his friends that the decreased exports are due to an increased home demand. Only a few days ago it was announced that the iron and steel mills of this country were working to only 65 per cent of their capacity, and that the unfilled orders of the United States Steel Corporation on March 31 showed a decrease of 372,615 tons, compared with February 28. Indeed, the outlook for the steel business is so poor that "some of the steel manufacturers have considered the question of reducing wages."

An increasing import of finished foreign manufactures and a lessened export of finished American manufactures tells the story of the tariff-for-revenue-only legislation up to date. It is going to prove a very serious misfortune for President Wilson and his party that the real beneficiaries of their tariff policy live some thousands of miles away overseas, and are not in a position to east any votes in this year's Congressional elections.

### BETTER PACKING OF WOOLS.

AMERICAN FLEECES SHOULD BE MADE AS ATTRACTIVE AS THEIR COMPETITORS FROM AUSTRALASIA.

There are wool growers in this country who understand the importance of putting up their wool in attractive ways. These men realize that there are right methods, and that they are profitable. Such wool growers can always command a premium for their wool above the prices secured by negligent competitors.

It would be unjust to the wool growers of the country not to recognize that they are paying more attention to this aspect of their industry than was given years ago. Some good results have come from the teachings of individual leaders in the wool growing industry of the Middle West and Rocky Mountain region, from constant efforts of the National Association of Wool Manufacturers, and from the National Wool Warehouse at Chicago. But a great deal still remains to be accomplished, and the Federal government has done a sensible thing in officially bringing the question of better packing of American wools to the attention of farmers and ranchmen of the middle and far West.

On the initiative of the Department of Agriculture, the Bureau of Animal Industry has prepared an exhibit of American and Australian wools for use in educational work. As the Tariff Board noted and officially reported, our Western wool growing States are lamentably behind Australia and New Zealand in the care with which wools are prepared and sent to market. The "wool classers" of the antipodes are men who might find advantageous employment in our Western country. They examine the wool when it is sheared, making certain that only one grade of wool is put into a bale, and that the bales of the same lot are uniform. As is well known, the fleeces are carefully skirted, and each fleece when it enters the bale is of even, serviceable quality.

All this care and attention are worth what they cost and more to the sheepmen of Australia and New Zealand. They have discovered that intelligent and honest grading and packing "pay." So have many of the more progressive sheepmen of the United States. It is not fair to bring an indictment against the entire industry. But that many American sheep growers are neglectful of their own business interests cannot be disputed when such an experience is possible as that narrated in the "Wool Record" of Bradford, England, in its issue of March 12:

## American Domestic Wools in Coleman Street:

Last Friday Messrs. Buxton, Ronald & Co. offered 92 bales of American domestic wools shipped from Boston. They attracted a good deal of attention, and much talk was indulged in. We carefully sampled the wools, and they were certainly typical of the class of wools which are being grown across the Atlantic. They presented very much the appearance of heavy, wasty Cape wools, and it would be very interesting to know the object of the owners in consigning this class of staple to Coleman Street. Some of the parcels would not give a clean yield of more than 31 to 32 per cent. The wools were fairly well grown, in exceedingly heavy and wasty condition, all the bellies and britch being

rolled in the fleece. Another outstanding feature was that the fleeces had all been tied mostly with thick fluffy binder twine, a good three yards being used in tying up almost every fleece. We should say that 2 to 3 ounces of this most objectionable twine was used in tying up the fleeces. A few had been tied with paper twine, a method in vogue that smacks of the antediluvian days of wool growing. It appears to us that American sheepmen have yet a lot to learn in the art of wool growing and the preparation of same for market. When one inspected the American domestic fleeces and saw in the next gangway beautifully grown Australian merinos and New Zealand crossbreds, the difference was more than words can possibly convey. There is no wonder at American buyers being over in Coleman Street buying freely fleeces grown "down under," and we forecast an increasing demand for Colonial wools at the hands of American manufacturers.

These wools that won the derision of Coleman Street were Montana and Idaho  $\frac{3}{8}$  blood, Montana and Idaho  $\frac{1}{2}$  blood, and Montana and Idaho merinos—a consignment of 92 bales in all, from Boston. They brought prices ranging from 18 to 20 cents a pound—except the Idaho merino which brought  $15\frac{1}{2}$  cents.

In this connection it is significant that the "National Wool Grower" announces that Mr. J. E. Cosgriff, one of the most alert and progressive of the leaders of this industry, has personally engaged Mr. W. T. Ritch to come to America to give instruction in preparing wool for market, and "ultimately to introduce the Australian system." Mr. Ritch was for fifteen years identified with the Australian wool trade, and has had, in all, thirty-six years of experience in sheep breeding, wool growing and manufacturing. It was he who recently investigated Western wool growing conditions for the Canadian government. Mr. Ritch has investigated wool growing in India, South America, and South Africa, as well as in Australasia, and he is now gathering the material necessary for the exposition of the Australian system in the United States.

The "National Stockman and Farmer" in a recent issue suggests another side of the problem that is well worth the consideration of wool merchants and manufacturers. It says:

At the recent London sales the best Australian Merino wools sold at 32c. unwashed. At the same time the best American Merino wools were worth at Boston 24c. unwashed. The difference of 8c. a pound in favor of Australian wools is due largely to the manner in which they are prepared for market. The Australian fleeces are skirted, legs and bellies left off, and the best

of them shrink about 50 per cent in scouring. The American fleeces are not skirted and shrink 60 to 62 per cent. In buying the manufacturer figures on the amount of clean or scoured wool he gets. He finds little difference in the cost of a scoured pound of wool from Australian fleeces at 32c. and American unwashed fleeces at 24c. Why should there be such a difference in the methods of preparing for market wools of the same character? The Australian grower has found that it pays him to market his product in the best possible condition because his buyers discriminate in favor of wool so prepared. The American grower has found that it does not pay him to prepare his wools properly because his buyers fail to discriminate. That is the reason why Australian wools come to market in good condition and why American wools do not. No amount of talking or writing will ever change that condition as long as the reason for it exists, as long as the man who prepares his wool properly is not paid for his trouble or actually loses money by it as in the past. Our manufacturers have spilled a good bit of ink instructing us how to put up wool, while their buyers have been showing us how to make the most money by disregarding their instructions.

But this is not a wholly one-sided question. Buyers assert, and with some reason, that they have been compelled to buy all the wools of any community at a flat price; that they could not discriminate between clips and hope to buy them all another year; that they have been compelled to pay a "safe" price in order to get the wool. A "safe" price means low enough to be safe to the buyer when he averages good and bad clips. No magnifying glass is necessary to see how unjust this is to the man who has good wool in good condition, but the question is how to overcome the difficulty. There is only one way, and that is for an organization representing growers to get together with buyers, guarantee the wool of its members and get the top price for it. If something of this kind is not done the deadlock which has demoralized the country wool trade for years will continue because the individual grower and the individual buyer cannot break it. We are told that wools must be put up in better condition in order to meet foreign competition. That competition is felt only indirectly by the individual producer. He feels first and most the competition of the careless or worse than careless man who gets the same price the careful man gets. As long as the grower must face this competition in his own township it will be useless to call on him to improve his wools in order to compete with Australia.

In a bulletin just issued by the Department of Agriculture it is said:

A preliminary report of the investigation into the methods of marketing American wool, now being conducted by the United States Department of Agriculture, indicates that from 10 to 20 per cent of the value of the crop is lost annually through the neglect of a few simple measures. Under existing conditions, when American and Australian wools lie side by side in the warehouse, the poor handling of American wools is so noticeable that the price is inevitably affected. This handicap would be removed to a great extent if all growers would agree to do four things:

Sack ewe, lamb, and buck fleeces in separate sacks.

Shear black sheep separately and keep the fleeces separate.

Tie the fleeces with paper twine, which does not adhere to the wool.

Remove the tags or dung locks and put them in separate sacks marked to show their contents.

Figures prepared by the Bureau of Statistics and based on reports from 383 growers who sheared in 1913 a total of 2,269,005 sheep show that at the present time about one-half of the flock owners sack ewe, lamb, and buck wool separately, about 60 per cent separate the black fleeces and tie with paper twine, and less than one-half put tags in separate sacks. It is pointed out, however, that the correspondents who took the trouble to answer the inquiries of the investigators, and from whose replies these statistics are compiled, presumably represent the more progressive element in the industry, and that if it were possible to obtain the facts from every wool grower in the country the percentage of those using the improved methods would be found to be much lower.

It is pointed out also that although, on the face of them, these returns do not seem so unsatisfactory, the value of wools produced in a given locality is set by the general reputation already established. Buyers will not alter their prices for small individual clips, though they may be better handled than the average, and in consequence those who do put up their wool properly are made to suffer for the sins of their neighbors.

Buying concerns can and may, however, allow their representatives more latitude in discriminating between individual clips. But even should they do so, prices could be altered only for clips of sufficient size to yield around 10,000 pounds of each grade contained.

Fifty-nine cases were reported in which dockage for tags was made upon the whole clip, although the tags had been separately sacked.

The remedy, the investigators declare, is to raise the reputation of a locality by an agreement among the growers not to permit any poorly handled wool to leave the community.

It cannot be said that the growers who follow the practices advocated by the market at present receive much, if any, compensation for so doing. As in other lines, it rests with such progressive individuals to bring their communities up to a common standard that will be of benefit to all.

In the opinion of the investigators the reforms already mentioned would be sufficient for the present to put American wool in a different light. Later it may be advisable to adopt the Australian methods of "skirting," or removing from the fleece the wool of the legs and belly, and grading before sacking, but this is not urged now.

### THE TEXTILE ALLIANCE.

# A NEW ORGANIZATION FORMED TO ENFORCE SOUND METHODS IN THE MILL SUPPLY TRADE.

In pursuance of the plans noted in the January Bulletin for systematic action against dishonest trade practices in the sale of mill supplies, the Textile Alliance has been incorporated by the members of the committee representing the various textile associations which have this work in charge. The incorporators are Mr. John P. Wood, of Philadelphia, President of the National Association of Wool Manufacturers; Mr. William A. Mitchell, of the Massachusetts Cotton Mills, Lowell, Mass., representing the National Association of Cotton Manufacturers; Mr. Caesar Cone, of the Proximity Cotton Manufacturing Company, Greensboro, N.C., representing the American Cotton Manufacturers' Association; Mr. Albert M. Patterson, president of the Waterloo Woolen Manufacturing Company, Waterloo, N.Y., representing the American Association of Woolen and Worsted Manufacturers, and Mr. John J. Nevins, the associate secretary of the American Association of Woolen and Worsted Manufacturers.

The purposes of the Alliance are stated to be "the protection of mill owners and operators from, and the reform of, abuses, unjust and unlawful exemptions, and frauds in the manufacture and sale of mill supplies, and the prevention and prosecution of unlawful, illegal, and improper actions, misdemeanors and crimes in connection therewith." It is understood that the Alliance will establish a chemical laboratory and a research bureau to which dyestuffs may be submitted for analysis and the comparison of price quotations.

At a meeting in New York on April 17 of the incorporators of the Textile Alliance, officers were elected as follows: President, Mr. Albert M. Patterson; vice-president, Mr. Caesar Cone; secretary and treasurer, Mr. J. J. Nevins. At the same meeting

Dr. August Hunziker, vice-president of the Weidmann Silk Dyeing Company of Paterson, N.J., was elected as a voting member of the Alliance, representing the Silk Association of America. The office will be in New York City.

The work of the Alliance is attracting wide interest in the textile industry, where the feeling is strong that the reforms which the Alliance seeks should long ago have been undertaken. In this connection President Andrew Adie, of the United States Worsted Company, in his recent annual report, states that he has sent out letters in the form of an agreement to the largest dyestuff concerns which read as follows:

In consideration that the United States Worsted Company has given and intends to give some portion of its business to us, we hereby agree to pay to the said company the sum of Five Thousand Dollars (\$5,000) as liquidated damages, if any person directly or indirectly in our employ, shall offer to give to any employee of said United States Worsted Company any gratuity, gift or present, with the intent of influencing the action of such employee in relation to the business of said company.

We further agree that our employees shall be notified forthwith that no such gratuities, gifts or presents are permitted, and that we have bound ourselves in the sum above mentioned to

answer in damages for any such offer or gift by them.

All of the four woolen and cotton associations are behind the Alliance. Its work will be pushed in a vigorous and systematic way, with the assistance of the principal dyestuff concerns doing business in the United States. The evil at which the Alliance aims is a serious and persistent one, but it is now being attacked, with every prospect of a final complete effacement.

### AN EXPERT YORKSHIRE VIEW.

# THE COMMENTS OF SIR SWIRE SMITH ON THE NEW AMERICAN TARIFF.

SIR SWIRE SMITH, president of the Keighley Textile Society, a British manufacturer well known and admired in the United States, gave the other day before his fellow-manufacturers an interesting Bradford view of the new American tariff. His consideration of the new law was prefaced by a summary of previous tariffs and of the varying experiences of the Bradford district

under them. Sir Swire described the Simmons-Underwood law as "a measure of far-reaching influence in many directions. In its relation to the trade of the United Kingdom, and especially to the wool industry of Bradford, it may prove to be the most important act of commercial legislation that has been passed since the Civil War."

He spoke of the wool industry of America "in all its branches" as having made "marvelous progress in extent and efficiency." "The largest and best equipped worsted factories in the world," he said, "are undoubtedly in America, and, in my opinion, helped as they will be by the new tariff when the adjustment of the economic conditions of labor and the cost of production have been assimilated with those of this country, those great factories will hold their own in efficient and economic production against all their competitors."

But Sir Swire betrayed some lack of knowledge of actual conditions in America when he declared that "The abnormally high price of wool and wool goods in America has made clothing exorbitantly dear, and has led to an adulteration of cloth and dress goods by a stealthy admixture of cotton and shoddy. The result is shown in a greatly reduced consumption of wool per head during the last twenty years, in great contrast to the increased consumption per head in this country."

Doubtless an impression of this kind prevails in Yorkshire and perhaps our kinsmen would attempt to justify it by citations from various public men and public journals of the tariff-forrevenue-only faction in the United States. But it is perfectly well known in this country by all persons familiar with the woolen or clothing trade, that it is not the cost of the cloth that makes the price of clothing "exorbitantly dear," if it is exorbitant. As a rule, the cost of the cloth in a suit of clothing is only from one-third to one-fourth of the price for which that suit is sold to the man who wears it. The Tariff Board in the course of its recent inquiry analyzed the elements that went into a good typical three-piece all-woolen suit manufactured to sell at retail at \$23 upwards. The three and one-half yards of cloth that went into the making of this suit cost in all \$4.78. regular wholesale price of this suit was \$16.50. It is manifestly not the cost of the cloth itself, but the cost first of the manufacture and then of the distribution of the clothing, that accounts for the high cost of apparel in the United States.

Sir Swire Smith is undoubtedly sincere in his assertion that cotton and shoddy have been utilized in increasing quantities in the American wool manufacture. He has seen the assurances of various American politicians and newspaper writers to this effect. But the impartial figures of the Federal census show, as a matter of fact, that the use of cotton and shoddy has been decreasing, and the use of new wool rapidly increasing in America. According to these government statistics, the quantity of wool consumed in condition purchased in American woolen and worsted mills increased from 330,179,000 pounds in 1899 to 474,751,000 pounds in 1909 — a rate of 40 per cent, or, reckoned on the scoured wool basis, a gain of 50 per cent, or far more than the increase in population. During this same decade the quantity of raw cotton consumed in the woolen and worsted mills of this country fell off from 40,245,000 pounds to 20,055,000 pounds, or 50 per cent, while the amount of cotton yarn purchased increased from 35,343,000 pounds to 39,169,000 pounds, or 11 per cent. net result," the Census Burean says, "is a decided decrease in the amount of cotton used as a material by wool manufacturers."

Shoddy also, as has been said, is a decreasing rather than an increasing factor in the American wool manufacture. On this point the Census Bureau states that the quantity of shoddy purchased fell off 35 per cent and the amount manufactured in woolen mills fell off 10 per cent. "In 1899," to quote this official authority further, "the total amount of shoddy consumed by woolen and worsted manufacturers was 68,663,000 pounds; in 1909 it was only 53,621,000 pounds, a decrease all the more significant when the growth of the industry is considered." The Census Bureau notes also in its survey of the American woolen and worsted manufacture "an improvement in the general quality of goods made."

The recent United States Tariff Board, as a result of its inquiries in the United States and the United Kingdom, declared:

The greatest shoddy producing center in the world is in or near Batley and Dewsbury in England. Of the 900 rag-picking machines in the United Kingdom, Yorkshire, in which Batley and Dewsbury are located, has 881 machines. In the whole of the United States there are only 346 rag-grinding machines.

In other words, the shoddy industry is only a little more than one-third as large in the United States, with 90,000,000 people,

as it is in the United Kingdom, with 45,000,000. It is the protectionist country, not the free trade country, that shows a notable improvement in the quality of the materials of its woolen and worsted manufacture for personal wear.

What will be the relative standing of the two countries under the present experiment in tariff for revenue only here can only be conjectured. But if we are to learn the future by the past, and to judge of the effects of the new tariff policy by the effects of the previous Gorman-Wilson experiment of 1894–1897, American manufacturers will now be forced to use more shoddy and cotton to compete with "low-priced" goods from abroad. There seems to be a lively appreciation of this circumstance in Yorkshire, for since the new tariff went into effect a great many Yorkshire dealers in shoddies and wool wastes have hastened to show their wares in the American market.

Woolen fabrics may be cheaper in the United States under the new radically reduced tariff, but that they will be generally of better quality nobody in this country outside of Congress and the newspaper offices will venture to believe. This new tariff, however, as Sir Swire Smith told his Bradford hearers, "is equivalent to the opening of a new market, for the sudden depression in the East is at least temporarily turning many eyes westward in the hope that relief may be found in that quarter. The effect of the new tariff is already being felt in wool; the great fact is before us that the wool manufacturers of America can now buy British and other wools for practically 6d. per pound less than they paid for them a few months ago. The spinners of America. who for the last sixteen years have been prohibited from buying imported tops, can now buy them at a duty of 8 per cent. The weaver who found it impossible to import foreign varn can now buy it at 18 per cent duty, while the importer of finished goods, who in many instances paid a duty doubling their price, can now effect his purchases on payment of a duty of 35 per cent."

Sir Swire is on safe ground in his prediction that tops, yarns, cloths, and dress goods will all now be imported in considerable quantities. But his satisfaction with the outlook is expressed with moderation. Bradford understands that no considerable part of the American market can be secured without a fight for it—and throughout the whole address, as throughout Yorkshire comment generally, there runs a recognition of American manufacturers as rivals deserving of respect and fear.

### ARE FACTORIES A "CURSE"?

### A POINTED REPLY TO THE ACCUSATION OF PRESIDENT-EMERITUS ELIOT.

In the pages of "Truth," the new and brilliant Boston weekly magazine, Mr. Thomas Robinson Dawley, Jr., author of "The Child that Toiled Not," makes sharp reply to the potent assertion of Dr. Charles W. Eliot, President-Emeritus of Harvard, that "the factory system is one of the greatest curses of civilization." Asks Mr. Dawley:

Does Dr. Eliot know what he is talking about in his condemnation of factories and the factory system? Or would he have us go back to the good old time right here in New England when there were no factories, for example, and our grandfathers lived on codfish and potatoes, rum and molasses, corn meal and fat pork, and were obliged to work sixteen hours a day to eke out a slender existence at that? And their children were obliged to work and give them their time and earnings too, if they had any, until they were twenty-one. There was no time for play then, and they did some work, as the stone heaps and stone fences attest in parts of rugged old New England to-day, now grown over with woods and brush.

In Spain there are no factories to speak of, no factory system to curse its civilization, and there is plenty of room for play. Schoolmasters are so abundant that the beggar, in soliciting arms. often pleads that he is as hungry as a schoolmaster. Every town and city has its bull-ring and theatre, and no one is overburdened with work, in fact, there is little or no work, and yet Spain in the days when she reared men inured to hard work, privation and skill, was the most advanced and highly civilized country in Europe. For fully a hundred years her armies never knew defeat. Even in that country to-day, its only glimmer of prosperity is in the province of Catalonia where it has a factory system giving employment to some, comparatively a few. On the other hand, look at what has taken place in Germany since the great Bismarck turned his attention to building factories in his country and sending his boy soldiers to work in them.

Mr. Dawley tells Dr. Eliot that "Regeneration took place in our New England States through the factories, and it is due to our factories that many of our schools and colleges owe their existence. It was through the open doors of its factories that the children of the very poor in that part of our country found a new and better life, just as they are doing in the South to-day.

If Dr. Eliot will turn to our census returns during the past hundred years, he will find townships in New England with rural populations that have decreased fully 70 per cent within that period. If he will close his books long enough and take a jaunt through some of these towns, he will find that, within the memory of the oldest inhabitants, there were little houses and big houses scattered all over them, and he may yet see the chimneys of some of them still standing and he may look into their ruined cellars.

Then came the factory which took the children—and there were many of them—of the poor, the idle and nonproductive, and gave them the means by which they not only earned ready money, but gained a knowledge enabling them to raise themselves to better things."

Finally, says Mr. Dawley:

If Dr. Eliot doubts this statement, let him go to such a place as Nooseneck Hill and inquire into the facts. Fifty-five years ago Nooseneck Hill was a flourishing factory village in the very center of Rhode Island, in the midst of poor farms, rocky hollows and poor people. In the winter of '58 and '59, the wheels of the factory were going round and its spindles were humming merrily. A new school, at the head of which was the factory owner, had sixty pupils in attendance, practically paid for by the output of the factory. Prosperity and education went hand in hand.

To-day Nooseneck Hill is a deserted village. The hum of the spindles is no more. The old schoolhouse is there, but there are no scholars, and it is closed up and is lapsing into decay. Almost every trace of the factory has disappeared, except a few tumble-down houses, roofless and barren, and the surrounding country has pretty well grown up in briers and brush; and the people—let Dr. Eliot tell us what has become of them.

### WOOLEN MILLS OF NEW JERSEY.

# SOME INTERESTING FACTS AND FIGURES AS TO THEIR BUSINESS IN 1911 AND 1912.

The thirty-sixth annual report of the New Jersey Bureau of Statistics, just published, contains many interesting statistical data for the year 1912, from which we cull the following facts concerning the woolen and worsted mills of the State, not including the manufacture of carpets, which is reported separately from the other branches of the wool manufacture. Twenty-eight establishments are considered in 1912, of which 21 are corpora-

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tions and 7 private firms, but only 27 were included in the 1911 report, of which 18 were corporations and 9 private firms.

1911.	1912,
27	28
77.78 per cent	85.89 per cent
\$40,812,045	\$40,111,947
\$8,387,311	\$8,164,594
\$10,645,115	\$8,610,610
\$21,779,619	\$23,336,743
\$20,336,257	\$25,431,604
\$5,258,081	\$6,486,099
\$30,855,767	\$39,431,811
13,116	14,727
5,865	6,618
6,564	7,276
687	833
\$400.89	\$440.42
	27  77.78 per cent \$40,812,045  \$8,387,311 \$10,645,115  \$21,779,619 \$20,336,257 \$5,258,081 \$30,855,767 13,116  5,865 6,564 687

The classified weekly earnings during the week of highest employment in 1912 by age and sex were as follows:

							Men.	Women.	Children.	Total.
Und	er \$	3 per	week				1	4		5
\$3	but	unde	r \$4	per	week	: <b></b>	5	69	87	161
84	"	6.6	\$5	- 44	4.4		75	451	432	958
\$5	"		86	"	44		189	1,582	298	2,069
86	4.6		\$7	4.4	4.4		305	1,955	57	2,317
\$7	44	6.6	\$8	44	6.6		430	1,440	13	1,883
\$8	"	6.6	$\ddot{s}_9$	66.	"		848	980	1	1,829
\$9	4.6	6 6	\$10	4.4	"		1,270	418		1,688
\$10	4.4		\$12	4 4	4.4		1,454	395		1,849
812	6.6	4.4	\$15	64	4.6		1,106	300		1,406
\$15	46	4 4	\$20	6.4	"		979	116		1,095
\$20	4.4	4 4	\$25	4 4	"		286	2		288
\$25	and	over					168	1		168
							7,116	7,712	888	15,716

Although the report for 1911 covers only 27 establishments, while that for 1912 includes the operations of 28, the total

capital employed is somewhat the smaller in the latter year, the decrease being in value of machinery, which was nearly offset by the increased value of live assets.

The average amount of capital per establishment for each year was \$1,511,557 for 1911 and \$1,432,570 for 1912. The average value of materials used per establishment in 1911 was \$753,195, and in 1912, \$908,271, while the average value of products was in 1911, \$1,142,806, and in 1912, \$1,408,279.

The average value of product to the one dollar of capital in each year was 75.6 cents in 1911 and 98.3 cents in 1912, a fact which indicates in some degree the effect of the lack of employment of machinery on the productiveness of capital.

The value added to the product by the processes of manufacture was, respectively, \$10,519,510 in 1911 and \$14,000,207 in 1912. The proportion of value added per operative was in 1911, \$802, and in 1912, \$951. The proportions of "value added" per one dollar of capital are 25.77 cents in 1911 and 34.9 cents in 1912.

## THE WOOLEN INDUSTRY OF PENNSYLVANIA IN 1912.

The fortieth report of the Pennsylvania Bureau of Industrial Statistics, which has just come to hand, contains among other valuable statistical statements the following tables and remarks concerning the woolen industry in the State in the year 1912. It is to be presumed, although the report does not so state, that the table relating to woolen goods contains the data concerning both the carded and combed wool manufacture. The yarn statistics probably relate only to yarns made of wool, although that is not clear from the report.

### MANUFACTURE OF WOOLEN GOODS, 1912.

Number of establishments considered	54
Capital invested (realty, machinery and working capital)	\$5,409,739
Total production in quantity (as reported), (yards)	18,584,353
Market value of production	\$13,902,002
Lost time in this industry, all causes (days)	102
Average number of days in operation	285
Average working hours in this industry (per week)	56
Average number employed as managers and office help	220
Total amount of salaries paid	\$328,263
Average number of wage earners employed	5,076
Males	,
Females	
Minors (under 16 years)	

### 216 NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

Aggregate amount of wages paid	\$2,428,396
Males \$1,451,948	
Females	
Minors (under 16 years)	
Accidents to working people in this industry:	
Non-fatal	27
Nationality of employees (as reported)	4,602
Americans	
Foreigners	
Negroes 5	
Strikes or lockouts, number	2

Extra fine conditions as to labor and to trade were reported by a few establishments. More reported better trade than for a number of years, or the best since 1907. Skilled labor was scarce, especially weavers. Labor was generally contented, but few strikes being reported.

### Manufacture of Blankets, Flannels, Etc., 1912.

Number of establishments considered	13
Capital invested (realty, machinery and working capital)	\$3,875,700
Market value of production	\$5,728,883
Lost time in this industry, all causes (days)	115
Average number of days in operation	293
Average working hours in this industry (per week)	55
Average number employed as managers and office help	49
Total amount of salaries paid	\$77,724
Average number of wage earners employed	2,415
Males	
Females	
Minors (under 16 years)	
Aggregate amount of wages paid	\$969,471
Males \$579,434	
Females	
Minors (under 16 years)	
Accidents to working people in this industry:	
Fatal	1
Non-fatal	3
Nationality of employees (as reported)	2,412
Americans	
Foreigners	
Negroes	

This industry was somewhat depressed by tariff agitation and legislative action, as well as by the upheaval of many trusts. As another result labor became uneasy, the unrest being accentuated by the high cost of living. In some localities labor became scarce and there was demand for shorter hours and greater pay. All these conditions had a tendency to unsettle trade, which was in no wise fully normal. A few establishments reported steady operations at good wages, with unclouded prospects for the future.

### MANUFACTURE OF YARNS, 1912.

Number of establishments considered	103
Capital invested (realty, machinery and working capital)	\$20,833,895
Total production in quantity (as reported), pounds	68,498,582
Market value of production	\$36,760,641
Lost time in this industry, all causes (days)	648
Average number of days in operation	285
Average working hours in this industry (per week)	58
Average number employed as managers and office help	343
Total amount of salaries paid	\$528,101
Average number of wage earners employed	13,255
Males       4,597         Females       7,090         Minors (under 16 years)       1,568	10,200
Aggregate amount of wages paid	\$5,142,672
Males\$2,548,061	
Females	
Accidents to working people in this industry:	
Non-fatal	147
Nationality of employees (as reported)	11,084
Americans	
Foreigners	
Negroes	
Strikes or lockouts, number	1

The year was a moderately good one, considering the many disturbing factors in existence. . . . In general, the latter part of the year was most favorable for good business. Female help was so scarce in many localities that but one-third of installed machinery could be used. In other parts business was superior, former years being excelled. Some mills had more orders than could be filled. Others had large volumes of trade, but complained of small profits.

Manufacture of Carpets and Rugs, 1912.	
Number of establishments considered	84
Capital invested (realty, machinery and working capital)	\$24,415,381
Total production in quantity (as reported):	
Rolls	11,325
Yards	18,263,990
Market value of production	\$27,051,243
Lost time in this industry, all causes (days)	710
Average number of days in operation	280
Average working hours in this industry (per week)	56
Average number employed as managers and office help	342
Total amount of salaries paid	\$463,224
Average number of wage earners employed	11,579
Males 7,030	
Females	
Minors (under 16 years) 514	
Aggregate amount of wages paid	\$5,715,918
Males \$4,008,272	
Females	
Minors (under 16 years) 141,839	
Accidents to working people in this industry:	
Non-fatal	86
Nationality of employees (as reported)	9,522
Americans 8,144	
Foreigners	
Negroes 7	

Uncertainty concerning tariff legislation and the high cost of living, which kept a large part of the public from buying carpets, compelled dealers to place small orders, and many plants reported this industry in poor condition, owing to these changes. Trade in ingrain carpets decreased noticeably and some large firms in that line retired from business. Rumors of strikes had a cautious effect upon many concerns, restricting their output to orders actually booked. In such cases the industry was reported as irregular, unsteady and, in a few instances, as utterly demoralized.

But most of the reports indicated either fair or good conditions as to trade and labor. One manufacturer said, "There is always steady employment for good, sober, industrious weavers and other operatives."

# COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF WOOL AND MANUFACTURES OF WOOL FOR THE TWELVE MONTHS ENDING DECEMBER 31, 1912 AND 1913.

### GROSS IMPORTS.

Articles and Countries.	Quantities f Months Decemb	ending	Values for Twelve Months ending December 31.	
	1912,	1913.	1912.	1913.
WOOL, HAIR OF THE CAMEL, GOAT, ALPACA, AND OTHER LIKE ANIMALS, AND MANUFACTURES OF:				
Unmanufactured-				
Class 1 — Clothing (dutiable) — Imported from—	Pounds.	Pounds.		
Belgium	286,111	83,261	\$65,702	\$24,627
Argentina	43,922,344 26,179,666	19,025,997 $18,708,432$	9,872,667 4,652,800	4,736,262 4,105,686
Uruguay	3,216,262	2,285,335	636,911	548,875
Australia and Tasmania	13,937,065	5,800,477	3,394,683	1,548,959
Other countries	3,755,763	6,880,173	783,169	1,625,453
Total	91,297,211	52,783,675	\$19,405,932	\$12,589,861
	_		1	
Class 2 — Combing (dutiable) — Imported from—				
Turkey in Europe	536,986	1,528,067	\$147,646	\$374,070
United Kingdom	17,762,991	7,541,437	4,241,744	2,132,149
South America	735,400 2,242,468	1,105,958 575,776	168,912 566,678	251,896 164,285
Other countries	449,589	355,236	97,139	96,476
Total	21,727,434	11,109,474	\$5,222,119	\$3,018,881
Hair of Angora goat, etc. (duti-				
able)		232,291		66,177
Total, Class 2	21,727,434	11,341,768	\$5,222,119	\$3,085,058
Class 3 — Carpet (dutiable) — Imported from—				
Russian Empire	50,338,666	16,396,657	\$4,152,475	\$2,389,97
United Kingdom	29,088,517	14,025,824	4,817,296	2,579,119
Other Europe	15,798,592 4,060,216	8,121,576 2,915,259	2,358,495 476,762	1,276,25° 408,61°
China	28,428,327	37,630,730	3,402,011	5,085,63
East Indies	5,574,882	2,067,682	680,732	265.68
Turkey in Asia	8,699,552	5,337,534	1,301,103	951,00
Other countries	3,104,953	1,192,998	393,452	145,07
Total	125,093,705	87,688,260	\$17,582,326	\$13, <b>1</b> 01,35
Total unmanufactured	238,118,350	151,813,703	\$42,210,377	\$28,776,27

<sup>\*</sup> Except alpaca and mohair, wool became free of duty December 1, 1913, and reduced duties on manufactures of wool took effect January 1, 1914.

# COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF WOOL, ETc.

## Gross Imports. -- Continued.

ARTICLES AND COUNTRIES.		for Twelve ending ber 31.	Values for Twelve Months ending December 31.	
	1912.	1913.	1912.	1913.
MANUFACTURES OF-				
Carpets and carpeting (duti- able)—	Sa Vando	Sq. Yards.		
1mported from—	sq. Iurus.	Sq. Iurus.		
Turkey in Europe	316,182	170,834	\$1,703,157	\$888,919
United Kingdom	133,167	142,586	504,561	465,096
Asia	484,797	609,933	2,036,773	2,552,694
Other countries	69,323	87,628	443,570	432,155
Total	1,003,469	1,010,981	\$4,688,061	\$4,338,864
	=-===			
Clotнs— (dutiable) —	Pounds.	Pounds.		
Imported from—	1001100	1 on man		
Belgium	537,994	524,618	\$600,319	\$595,312
Germany	846,887	1,325,369	844,490	1,376,759
United Kingdom	2,627,239	2,442,318	3,047,062	2,879,470
Other countries	297,146	565,479	402,130	718,309
Total	4,309,266	4,857,784	\$4,894,001	\$5,569,850
Dress Goods, Women's and Children's—(dutiable)— Imported from—	Sq. Yurds.	Sq. Yards.		
France	3,081,732	3,783,508	\$726,578	\$1,052,871
Germany	1,833,478	2,748,475	462,578	744,535
United Kingdom	9,736,640	9,637,711	1,853,246	2,037,788
Other countries	136,178	98,510	42,503	39,892
Total	14,788,028	16,268,204	\$3,084,905	\$3,875,086
Press cloths				\$4,317
Wearing apparel			\$2,253,895	2,047,442
Wool wastes		781,725		138,479
All other (dutiable)			• • • • •	1,377,385
Total manufactures of			\$15,841,713	\$17,351,425

# COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF WOOL, Etc. — Concluded.

EXPORTS OF WOOL AND MANUFACTURES OF.

	FOREIGN.			
	1912.	1913.	1912.	1913.
ARTICLES.	Quantities.	Quantities.	Values.	Values.
WOOL, HAIR OF THE CAMEL, GOAT, ALPACA, ETC., AND MANUFACTURES OF:				
UNMANUFACTURED— Class 1—Clothing, lbs., dutiable. Class 2—Combing, " " Class 2— " free Dec.	1,359,236 12,120	2,447,938 138,103	\$243,383 2,725	\$556,291 30,221
1, 1913	444,902	1,592 1,229,086	52,884	$\frac{399}{147,278}$
1913		2,049		525
Total unmanufactured	1,816,258	3,818,768	\$298,992	\$734,71
Manufactures of— Carpets and carpetings, sq. yds., dutiable Cloths, pounds, dutiable Dress goods, women's and children's, sq. yds., dutiable Wearing apparel, pounds, dutiable All other, dutiable	4,453 36,938 234,008	9,138 36,042 518,219	\$36,820 32,846 42,685 13,405 12,351	\$73,619 34,008 87,009 14,658 31,137
Total manufactures of			\$138,107	\$240,435
I	OMESTIC.			
Wool, AND MANUFACTURES OF: Wearing apparel	114,437,174	27,701,730	\$2,193,846 477,001 838,963	\$2,297,171 968,456 1,324,269
Total manufactures			\$3,509,810	\$4,589,896

Included in all other prior to July 1, 1912.

WOOL BEING FREE AFTER DECEMBER 1, 1913, IS NOT REPORTED AS BEING STORED IN BONDED WAREHOUSE.

# QUARTERLY REPORT OF THE BOSTON WOOL MARKET FOR OCTOBER, NOVEMBER, DECEMBER, 1913, AND JANUARY, 1914.

Domestic Wools. (George W. Benedict.)

		1913.	1912,	1914.	
	October.	November.	December.	December.	January.
Ohio, Pennsylvania, and					-
WEST VIRGINIA. (WASHED.)					
XX and above	$26 \ \bar{g} \ 27$	25 § ā 26	25½ <u>a</u> 26	31 à 32	$25\frac{1}{2}\tilde{g}$ 26
X	25 g 26	24 g 25	24 g 25	29 @ 30	24 @ 25
Blood	30 g 31 30 g 31	29 <u>a</u> 30 29 <u>a</u> 30	29 <u>6</u> 30 29 <u>6</u> 30	37 @ 38 37 @ 38	29 <u>å</u> 30 29 <u>a</u> 30
1 "	30 g 31	29 g 30	28 g 29	37 @ 38	28 g 29
Fine Delaine	27 <u>a</u> 28	27 g 28	26 g 27	34 @ 34½	26 <u>a</u> 27
(UNWASHED.) Fine	20 ā 21	20 ā 21	20 a 21	23 @ 24	20 @ 21
½ Blood	23 a 24	$22 \ \bar{a} \ 23$	22 g 23	29 @ 30	22 a 23
3 44	23 <u>a</u> 24 23 <u>a</u> 24	22 <u>ā</u> 23 22 <u>ā</u> 23	22 <u>a</u> 23 22 <u>a</u> 23	30 <u>@</u> 31	22 <u>a</u> 23 22 <u>a</u> 23
Fine Delaine	22 à 23	22 <u>â</u> 23 22 <u>â</u> 23	22 d 25 22 d 225	30 @ 31 28 @ 28½	22 <u>a</u> 23 22 <u>a</u> 22
MICH., WIS., N.Y., ETC.					5
(WASHED.) Fine					
1 Blood	29 @ 30	28 â 29	28 <u>a</u> 29	36 g 37	28 <u>â</u> 29
§ " • · · · · · ·	$29 - \tilde{g} - 30$	28 @ 29 28 a 29	28 a 29	36 à 37	28 a 29
Fine Delaine	29 & 30 26 a 27	25 <u>a</u> 29 26 <u>a</u> 27	28 <u>a</u> 29 25 a 26	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	28 ā 29 25 ā 26
(UNWASHED.)					
Fine	19 g 20 22 g 23	19 @ 20 21 @ 22	19 @ 20 21 @ 22	22 @ 23 28 g 29	19 <u>å</u> 20 21 <u>å</u> 22
1/2 Blood	22 a 23	$21 \cdot a \cdot 22$	21 @ 22	29 a 30	21 8 22
4 "	22 g 23	21 à 22	$21 - \bar{a} - 22$	29 a 30	21 a 22
Fine Delaine	21 <u>a</u> 22	21 g 22	20 g 21	$26 \ a \ 26\frac{1}{2}$	20 <u>a</u> 21
( )					
3 Blood	24 g 25	23 @ 24	23 <u>a</u> 28½	31 3 32	23 g 23
4	24 <u>6</u> 25 28 <u>a</u> 24	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	23 <u>a</u> 23½ 21 <u>a</u> 22	31 <u>a</u> 32 26 <u>ā</u> 27	23 a 23 21 a 23
Braid	20 8 24	8	21 8 22	20 8 21	21 11 2.
(UNWASHED.)		22 - 221	22 5 221	20 = 201	22 6 0
3 Blood	22 <u>ĝ</u> 23 22 <u>ĝ</u> 23	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	22 <u>@</u> 22½ 22 <u>@</u> 22½	29 <u>a</u> 29½ 29 <u>a</u> 29½	22 @ 2: 22 @ 2:
Braid	22 @ 23	$21\frac{1}{2}\frac{3}{6}$ $22^{2}$	21 8 222	26 8 27	21 8 2
TEXAS.					
(SCOURED BASIS.) 12 months, fine, and fine					
medium	50 <u>a</u> 52	50 g 52	50 <b>g</b> 52	60 g 62	51 g 53
6 to 8 months, fine 12 months, medium	46 ā 47 46 ā 47	46 <u>a</u> 47 46 <u>a</u> 47	46 <u>a</u> 47	53 @ 55 53 @ 55	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
6 to 8 months, medium.	40 @ 41	40 a 41	40 @ 41	47 a 50	$40  \bar{a}  4$
Fall, fine and fine med	42 g 43	42 a 43	42 @ 43	48 g 50	42 a 43
" medium	38 <u>ā</u> 40	38 g 40	38 <u>a</u> 40	43 a 45	38 <u>a</u> 4
(SCOURED BASIS,)					
Free, 12 months 6 to 8 months	47 @ 48 44 @ 45	46 g 48 44 g 45	46 @ 48 44 @ 45	52 <u>a</u> 54 46 <u>a</u> 47	46 g 4
Fall free	42 ā 43		42 g 43	45 g 46	42 å 4
" defective	36 g 38	36 g 38	35 g 38	38 # 42	35 <u>a</u> 3
" defective TERRITORY WOOL: Montana, Wyoming, Utah,					
Idaho, Oregon, etc.					
(SCOURED BASIS.)	50 = 51	52 g 54	51 <u>ā</u> 53	ee e=	51 5 5
Staple, fine and fine med.	52 <u>a</u> 54 48 <u>a</u> 50	48 g 50	47 g 48	66 <u>u</u> 67 61 <u>a</u> 63	51 @ 5 47 @ 4
Clothing, fine and fine				1	
Clothing medium	47 g 49 43 g 45		46 g 48 42 g 44	60 <u>@</u> 61 57 <u>@</u> 58	46 <u>a</u> 4 42 <u>a</u> 4
Clothing, medium New Mexico, (Spring.)	40 @ 40	70 g 40	4~ 6 44	8	72 () 4
(SCOURED BASIS.)			15		10 - 1
No. 1 · · · · · · · · · · · · · · · · · ·	47 g 48 42 g 43	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	47 <u>a</u> 48 42 <u>a</u> 43	57 g 58 51 g 53	48 <u>a</u> 4 42 <u>a</u> 4
No.3	37 g 38	37 g 38	37 <u>a</u> 38	45 g 46	37 a 3
No. 4	34 <u>a</u> 35		34 @ 35	42 â 44	34 <u>@</u> 3
GEORGIA AND SOUTHERN. Unwashed	22 <u>ā</u> 23	21 à 22	21 <u>ā</u> 22	28 @ 30	21 @ 2
On washed a	22 9 20	2. 9 2.	2. 6 22	20 9 00	3 -

### Domestic Wool.

JANUARY 31, 1914.

The market for the months of October, November, and December showed very little change in values, and manufacturers bought only such supplies as they were in immediate need of. Most of them had been pursuing the "hand to month" policy for so long that their stocks were quite depleted and they were therefore obliged to buy in fair quantities from time to time to keep their machinery running.

The much-discussed Underwood Tariff Bill became operative on wool on November 1 and on manufactured goods January 1. Just what further effect this would have on prices was problematical, many predicting, however, that the depression of values had been amply discounted.

The stock on hand January I was very light and as manufacturers began to take substantial orders during this month, the demand for wools increased surprisingly, so that the supply of domestic wool melted away very rapidly, causing a much better feeling in the trade and changing conditions from a buyers' to a sellers' market. This, however, was attended without much enhancing of values up to this writing, outside of quite a speculative movement in A and B supers.

It has already developed that the worst competition manufacturers will have to meet during this heavy weight season will come from their own fellow manufacturers in this country as prices named for goods have been on such a low basis that the foreigner will not be a serious factor. The coming light weight season will be a much more severe test of the foreign competition which we may expect from our new tariff law than the season now on.

GEORGE W. BENEDICT.

PULLED WOOLS. (Scoured basis.) (W. A. BLANCHARD.)

		1913.	1912,	1914.	
	Oct.	Nov.	Dec.	Dec.	Jan.
Extra, and Fine A	48 g 53	48 g 53	50 g 54	57 to 62	52 <u>ĝ</u> 56
A Super	43 @ 46 36 @ 38 32 & 35	43 à 47 37 à 39 32 a 35	45 <u>ā</u> 48 37 <u>ā</u> 40 33 <i>ā</i> 56	53 (a 55 48 (a 53 38 (a 42	47 @ 50 40 @ 42 35 @ 37
Fine Combing	43 <u>@</u> 45 40 <u>@</u> 42	44 <u>a</u> 46 40 <u>a</u> 43	45 <b>â</b> 48 41 <b>ā</b> 44	57 (a 60 52 (a 55	47 @ 50 43 a 45
Low Combing	36 <u>@</u> 38 47 <u>@</u> 59	37 <u>å</u> 38 48 <u>å</u> 50	37 @ 39 50 @ 52	48 (a 50 55 (a 58	38 @ 40

#### Remarks.

FEBRUARY 1, 1914.

The market through October and November was dull and weak and stocks accumulated. The best B supers of the year are made in these two months, but, owing to lack of demand, the New York pullers were forced to drop their price on this grade from 33 to 30 cents (grease) in order to effect sales.

Early in December there was a movement in Chicago scoured B's and some 1.500 bags were sold to eastern dealers at 32 @ 34 cents. About the middle of the month 2,500 to 3,000 bags of New York B's were taken by two large worsted mills at 30 @ 31 cents in the grease, and there were also sales of A's at 33 @ 34 cents (grease). These transactions marked a turn in the market for the better, and late in the month Chicago scoured A's were cleaned up at an advance of two cents a pound.

Trade was especially active through January and pullers kept sold up to production, with contracts ahead for their combing grades. The advance in prices was of doubtful advantage, however, as the comparative rise in sheepskins was in excess of the advance obtained for wool. Pelts were as high as in January of the previous year, while wool prices averaged fully 10 per cent lower.

W. A. Blanchard.

Foreign Wools. (Mauger & Avery.)

	1913.				1912.		1914.				
		Oet.		Nov.		Dec.		Dec.		Jan.	
Australian Combing:	40	$\bar{a}$ 42	40	ā 41	39	a 40	42	G 15	9.6	a 37	
Choice	39		38	a 40	36	ā 38	40	@ 45	36 35	a 36	
Good		ā 40			35			@ 41			
Average	38	<u>a</u> 39	37	g 39	35	ā 36	37	ā 39	34	<u>ā</u> 35	
Australian Clothing:											
Choice	42	e 43	41	$\hat{a}$ 42	39	â 40	43	@ 45	37	ā 38	
Good	39	g 40	38	ā 40	57	ĝ 38	41	$\tilde{a} = 42$	36	ā 37	
Average	37	$\bar{a}$ 38	37	$\hat{a}$ 38	35	<u>ā</u> 36	39	@ 40	34	@ 3a	
Bydney and Queensland:									i		
Good Clothing	41	ā 43	41	$\bar{a} = 42$	39	a 40	42	ā 45	37	$\hat{a}$ 38	
Good Combing	38	à 40	37	ā 39	36	ā 38	40	a 43	35	$\bar{a}$ 37	
Australian Crossbred:					1	-		-		-	
Choice	38	a 39	37	$\tilde{a}$ 38	37	a 38	40	ā 43	35	a 3	
Average	36	a 38	35	ā 37	35	ā 37	35	3 38	32	à 3-	
Australian Lambs:	00	.5	0.5	3 0.		3	00	3 200	-	2 -	
Choice	40	$\hat{a}$ 42	39	a 40	38	ğ 39	42	ā 45	36	à 38	
Good	38	å 39	37	ā 38	35	ā 36	39	ā 40	34	ā 36	
Good Defective	35	g 37	34	à 36	33	ā 34	37	a 38	32	à 3-	
	50	0.01	94	0.00	33	0 24	- 51	0.00	32	ti o.	
Cape of Good Hope:		5 00	200	- 05	0.1	s 91	9.1	2 20	30	â 33	
Choice	34	ĝ 36	32	g 35	31	ĝ 34	34	<b>3</b> 6	26	a 25	
Average	30	$\hat{a}$ 33	29	<b>a</b> 30	27	@ 28	30	<b>@</b> 33	26	@ 2	
Montevideo :								- 00		+ 0.5	
Choice	37	$\tilde{a}$ 40	.35	ā 36	32	ā 34	36	ā 38	30	@ 32	
Average	36	$\hat{a}$ 37	34	â 35	30	ā 32	33	£ 35	28	ā 30	
Crossbred, Choice	35	a 37	34	ā 35	31	ā 33	36	@ 39	30	ā 3:	
English Wools:											
Sussex Fleece	40	g 42	39	$\hat{a}_{-40}$	32	@ 33	42	<b>@ 4</b> 3	31	ĝ 3:	
Shropshire Hogs	39	ā 40	38	$\hat{a} = 40$	32	a 33	41	@ 42	- 31	å 3:	
Yorkshire Hogs	38	<u>ā</u> 40	38	$\bar{a}$ 40	32	a 33	37	@ 39	- 31	@ 3:	
Irish Selected Fleece	36	a 38	35	ā 37	30	ā 32	39	ã 40	29	a 30	
Carpet Wools:		•		-				_			
Scotch Highland, White .	24	ā 25	23	@ 24	20	@ 21	23	a 25	19	@ 20	
East India, 1st White Joria	31	<u>a</u> 33	30	ã 31	29	g 30	32	g 35	28	a 29	
East India, White Kanda-	•	3	1	5		_				_	
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### FOREIGN WOOLS.

FEBRUARY 1, 1914.

The four months under review cover one of the most important periods in the history of the wool trade in the United States, December 1 being the date when the duties on all wool except mohair were removed. As these duties had been 12 cents on class one, 11 cents on class two, and 4 cents to 7 cents on class three in the grease and three times the duty when scoured, it can be readily seen that quite a decline in values must take place under free wool. In fact, the decline in values was expected and prices were lowered gradually for several months in anticipation.

The demand for foreign wools was not active because domestic wools were generally below free trade prices, but manufacturers of class three wools, owing to the smallness of supplies, were fairly steady buyers of combing wools at prices considerably above the free wool basis previous to December 1. Domestic wools of all kinds being unusually scarce, a remarkable impetus was imparted to the importation of foreign wools of either description.

MAUGER & AVERY.

## THE TEXTILE BUREAU.

An office in connection with the work of the Textile Bureau, to prevent the fraudulent undervaluation of imported textile manufactures, has been opened on the sixth floor of the Singer Annex, 95 Liberty Street, New York. Every instance of imported goods sold here at prices that suggest a probability of undervaluation should be immediately reported to the Bureau at the above address.

JOHN P. WOOD,
Director.

## BULLETIN

OF THE

# National Association of Wool Manufacturers

### A QUARTERLY MAGAZINE

DEVOTED TO THE INTERESTS OF THE NATIONAL WOOL INDUSTRY.

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BOSTON, JULY, 1914.

[No. III.

## THE WOOL CONFERENCE IN WASHINGTON.

AN IMPORTANT GATHERING BROUGHT ABOUT BY THE DEPARTMENT OF AGRICULTURE.

Following the action of the Federal Department of Agriculture noted in the April Bulletin — the acceptance by the Department of the gathering of the statistics of annual wool production so long conducted by the National Association of Wool Manufacturers — the Secretary of Agriculture, Hon. David F. Houston, called an important conference of wool manufacturers, wool merchants and wool growers to assemble in Washington on June 2, 3, and 4, for the purpose of considering the subject of improved methods of handling of wool and raising of sheep in the range and farm States of this country.

This formal conference was preceded on May 13, 1914, by a preliminary conference at which several of the officials of the Department of Agriculture consulted with Mr. William Price, of Boston, of the Arlington Mills, representing the National Association of Wool Manufacturers, with regard to a program for the meeting. The program as finally drawn up and announced by Secretary Houston was as follows:

The Purpose of the Conference. Opening address by Dr. B. T. Galloway, Assistant Secretary of Agriculture.

Manufacturing Value of American Wool.

Present Methods of Handling American Wools on the Farm and Ranch.

Foreign Methods of Handling Wool.

Methods of Effecting Improvement in the Handling of American Wool.

Control of Predatory Animals in Range States.

The Dog Problem in Farm States.

Means of Increasing the Number of Farm Sheep.

Improvement in Range Breeding Methods.

Statistics on Sheep and Wool.

The formal conference opened at 10 A.M., in the National Museum in Washington. In the absence from the city of Secretary Houston, Dr. Galloway, Assistant Secretary of the Department, welcomed the delegates. Dr. Galloway stated that the Department realized the need of strenuous activity in the field of distribution and marketing. For several years the Department had been quite active with respect to cotton. Through action of Congress a few years ago cotton had been standardized, and the Department had been at work upon a number of questions of cotton marketing and cotton handling which bore more or less on the problems of wool. wool product amounted to something like \$60,000,000 annually in the country, and Dr. Galloway added that he had been reliably informed that if proper methods of handling and marketing were applied to the wool clip, the value of the product would be increased fully 10 per cent.

Thereupon Dr. Galloway introduced Mr. G. M. Rommel, Chief of the Division of Animal Husbandry, the permanent presiding officer of the conference. Mr. Rommel explained that the program for the conference had been made up after consultation with persons interested in the subjects to be discussed. The only restriction that would be placed on the debate would be that everybody should state his opinion in a courteous and friendly way. The first theme for discussion was the manufacturing value of American wool, and as the first speaker of the conference, the chairman called upon Mr. William Price, of Boston, wool buyer of the Arlington Mills in Lawrence, Mass., to represent the National Association of Woolen and Worsted Manufacturers.

### MR. PRICE ON AMERICAN WOOLS.

Mr. Price recalled the anecdote of the man rushing into a country store and shouting, "What is the price of wool?" There were woolen manufacturers who needed one kind of wool; worsted manufacturers who needed something entirely different: felt manufacturers who needed another value in their wool, and hosiery men who needed still another—so that there were necessarily all kinds of grades and styles of wool and all kinds of prices, but the manufacturing value of wool depended entirely on what it was going to be used for. Mr. Price suggested that there was nothing grown in the United States that had more value than the Ohio delaine wool. That had grade, staple, and strength. If something was wanted for a very fine, soft finish there was nothing better than Australian merino wools in the finer grades. A hard-finished piece of goods required a certain attribute in the wool. A soft-finished piece needed still another kind the more ends that could be got on the face and into the finish gave a softer, better finish. In hosiery the need was for light, fluffy, springy yarn, and the nature of the wool had to be such that it would produce that. The felt manufacturer required wool the felting or fulling properties of which were such that it would knit very closely together. If worsted manufacturers needed a strong wool, they had to pay more for it than if they could use a shorter stapled wool — so that the manufacturing value of wool depended very largely on what use it was to be subjected to.

In answer to an inquiry by Mr. Joseph T. Wing, of Ohio, whether the strongest wools were raised in Ohio, West Virginia, and Pennsylvania, Mr. Price replied that the strongest wools for staple were probably the Ohio delaine. Ohio delaine wool had more character than the average Michigan wool, although northern Ohio and southern Michigan wools were hardly distinguishable alongside each other. The wools in West Virginia and western Pennsylvania as a rule had been and were rather finer than the Ohio wools, which were going more to crosses. In answer to other questions Mr. Price said there was not so much manufacturing value in Ohio

wools to-day as ten or twenty years ago, because then those wools were almost entirely merinos and now a large percentage were crossbreds from mutton sheep.

### ADDRESS OF MR. GRUNDY.

Following Mr. Price, Chairman Rommel called upon Mr. Joseph R. Grundy, of William H. Grundy & Company, worsted spinners, Bristol, Pa., to speak on the subject of the manufacturing of American wools. Mr. Grundy stated that he had come more as an interested listener than in any other way, but he was glad to recognize that the government was taking up the wool question, which it had heretofore almost neglected as compared with the attention given to other phases of agriculture. The manufacturers, said Mr. Grundy, had always understood that the very method of raising wool in this country in relatively small bands of sheep and in conjunction with other products made it difficult to establish any such system of putting up and caring for wools as was possible in Australia and New Zealand, where the business was carried on as an occupation by itself, and where the points of production were so far removed from the markets and the production is so large that it is practical to class or sort the wools at the stations, bale them according to their class, and send them to the market in a manner acceptable to the buyer. Those American manufacturers whose consumption of American wool had been a large part of their total consumption had grown gradually to recognize these deficiencies in the putting up of American wool, as compared with the putting up of foreign wool, to be a fixed charge on the wool, and consequently in the consideration of its purchase the cost of these deficiencies had been figured in. There had been of late a commendable absence of the sisal twine in American wools, due largely to the National Wool Warehouse. If attention were given by the growers to putting tags in separately, it would be to their advantage. These tags, twine, paint, dirt, pieces of stone, etc., found in American wool were permanent charges against it, as compared with the foreign wool, and these charges were properly deducted and reckoned for by

the manufacturers, who bought on the basis of scoured wool.

In answer to inquiries of Chairman Rommel, Mr. Grundy stated that wool of equal grade on a scoured basis was worth just as much to the manufacturer whether it came from the Western States or from Australia, and that the price which that wool would receive would depend upon what had to be done with it before it could be made ready for manufacture.

### ADDRESS OF MR. FISLER.

Mr. John Fisler, of Philadelphia, Treasurer of the Yewdall & Jones Company, like Mr. Grundy a member of the National Association of Wool Manufacturers, was next called by Chairman Rommel. Mr. Fisler recalled the fact that some years ago he was a sheep-owner in southern Utah, and well knew some of the troubles of the industry. Mr. Fisler said that the wool growers were not getting the value of the main sorts of their wools, and never would while those wools were put up as they were to-day. He added that speaking of quarter blood, three-eighths blood and half blood fleeces grown east or west of the Missouri River, they had no equal, in his opinion, for cheviot and knitted yarns. Foreign yarns and foreign wools were coming into this country pretty heavily just now, and at the same time the American clip was advancing. Why was it advancing? There were two reasons — first because of its intrinsic value in quarter blood, three-eighths blood and half blood above the foreign stock for the purposes named, and second because of the scarcity of wools. Mr. Fisler stated that he had bought domestic wools in the month of May on an average of three cents per pound scoured less than the foreign wools. That statement was made immediately after the statement that the domestic quarter, three-eighths and half bloods were the best in the world — and why? Because when a manufacturer buys domestic wool he is a gambler, and does not know what he is going to get because of the off-sorts, the brand, and the string.

Mr. Fisler said that if the German manufacturer had in Germany the same wool of the same intrinsic value that America has, Emperor William would tax every man, woman and child in Germany to maintain and increase that clip. Mr. Fisler had a record of some wool bought in the Boston market that came from Idaho. He did not select this because it was Idaho wool. He selected it simply because his experience with it had occurred since the first of the year, and it would interest Minnesota as well as Idaho wool growers. The record was as follows:

Idaho Wools J. W.	. &	COMPANY.
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Sorting Test.	Scouring Te	st.
J. W. & Co. 12-18-1913.	J. W. & Co. 12-	8-1913. Idaho Springs cost 18½ cts.
10 bags Soda Springs	6's Soda Spri	Loss in weight 1.96+% Shorts, strings, clips, low,
103 lbs. 7's 2496 net	Grease	etc 11.25+4
1919 " 6's 2447 "	1226 net	Main sorts 86.79+%
144 " 5's		Actual cost main sorts . 20.06+ct
151 " 2'X 49 "		Actual shrinkage of main
17 " seedy	12-20-1913	
2 " gray	12-20-1318	of wool purchased 57.89%
62 " shorts	Scoured Rev	
	Scoured Rev	
		of wool scoured 51.46%
35 " clips		8 net
_	51.46% 5	1.22% Cost 41.32 cts.
2447 "		

Mr. Fisler, in commenting upon the record, said that for every 100 pounds of what is commercially known as wool the loss was 1.96 per cent in shrinkage. Then there was a loss in shorts, strings, clips, etc., of 11.25 per cent, making very nearly 14 per cent. The result was that out of the main sort of those Idaho wools he got only 86.79 per cent of what he wanted. Thus if a man bought 100,000 pounds of those wools he had 13 per cent lying idle in his mill. He had to sell at a low price and he had his loss in sorting. The result was that he had, at 20 cents a pound, 13,000 pounds of wool, or \$2,600, tied up on which he was paving interest, storage, and insurance. On the Australian crossbreds he had only lost .87 per cent in sorting, and on the shorts only .17 per cent. result was that on the main sorts of the Australian wool he had 98.96 per cent, a loss of only 1.4 per cent from what he had purchased, as compared with 14 per cent in the American

wool. The figures presented by Mr. Fisler as to Australian wools were as follows:

Sorting Test.	Scouring Test.	
Winslow & Co. 3-6-14.	Winslow & Co. 3-6-14.	50 crossbred cost 28 cts.
No. 1205.  2 bales 50's crossbred  9 lbs. 7's 570 net 553 " 6's 565 " 2 " 5's — 1 " shorts 5 "	No. 1205.  2 bales 50's crossbred 6's grease 553 net  Scoured 350 net 36.70%	$ \begin{array}{llllllllllllllllllllllllllllllllllll$
909		Cost 44.69 cts

Australian Wools. - Winslow & Company.

On the Australian wools for which he paid 28 cents he only went up to 28.29, a quarter of a cent. The main sorts of the Idaho wools cost 41.32 cents clean, without any cost for sorting. The Australian wools cost 44.59 cents, the same grade as far as could be matched from an Australian wool to an Idaho wool. And yet Mr. Fisler said he would prefer the Idaho wool, but on a free wool basis he was going to take as little a chance as possible. Mr. Fisler agreed with Mr. Grundy that in regard to paint and twine conditions had wonderfully improved, and that fully 90 per cent of the wools west of the Missouri River had the proper kind of twine on them.

#### ADDRESS OF MR. PRICE.

Mr. William Price, of Boston, was presented by Chairman Rommel to read his formal paper, prepared for the conference. Mr. Price said:

"Mr. Chairman and Ladies and Gentlemen: I am sure that you would accuse me of plagiarism if you had not known that I have been sitting here all the morning. There are so many points that I have tried to cover in my paper that have already been covered in various ways that I think it will not require very much discussion.

"At this conference I appear before the Bureau of Animal Industry as a wool expert, representing the National Association of Wool Manufacturers and the American Association of Woolen and Worsted Manufacturers.

"The subject which I am to talk on is 'The Better Putting Up of Wools by the Sheep Raisers,' and I shall try to show them good reasons why it would be to their, and our, mutual interests that they pay attention to the suggestions which I have to offer. I think, right at the start, that I can hear the wool growers say, 'What is the use talking to us about getting our wools up in better shape when the wool men are very anxious to buy on the sheep's back?' Even if this continues, it will be to the wool growers' interest to adopt the suggestions which I am about to make.

"First, in the matter of

## Strings.

"It is very well known, now, that the sisal and rough fibered strings are a great damage to the manufacturer. The best string that we know of at present is the paper string, such as is now being used to some extent in the Territories. The objection the wool man has to the paper string is that the shearers only twist it, and do not knot the string, so that it comes apart, and acts the same, under those conditions, as if the wool was not tied at all. If the growers will have this in mind and remedy this defect, paper string will answer admirably. It may be information to some when I state that in Australia the wools are put up very largely now without any string, and when string is used, it is a fine glazed string, about like a light fishline.

Mr. Wing. — "Do you like the fleece to be not tied at all? Mr. Price. — "As a manufacturer we like them not tied. As a wool man handling the American clips it is absolutely necessary that they should be tied because of the grading.

"In England there is no string used on the fleeces. The neck end of the fleece is twisted into a rope and bound around the wound-up fleece, so that it holds the fleece without a string. In the Argentine they are abandoning tying the fleeces, to a considerable extent, and in South Africa they do not put any strings on their wools.

## Packing.

"The tags, bucks, black and mohair should be packed separately. In some sections of the Territories there is a certain percentage allowance for tags and bucks, but wool could be bought on a good deal more intelligent basis, safer both for the seller and buyer, if the exact amount were known, by the wools being packed separately. Packing tags with the wool is likely to discolor the wool, in many cases. The locks of the black fleeces, when packed with the white, are liable to remain in the wool after sorting, and this is a disadvantage that is expensive for the manufacturers to overcome.

"Mohair, particularly, should never be packed with wool, as the hairs get mixed with the wool, and for many purposes this makes the wool value less. If you must ship mohair with the wool, be very careful to have it wrapped up separately and put in the butt of the bag, with burlap around it, so that by no possibility can it come in contact with the wool.

# Skirting.

"In regard to skirting the wools, it is a question whether it would be feasible, particularly in the Territories. With a few of the big clips, where it would be profitable to employ a professional classer, it might be profitable, but I have very grave doubts as to its being profitable even with the big clips; and further, if the tags are kept out of the wool, there would not be the same good reasons for skirting the wools here that there are in Australia or South America, where there is liable to be burrs on the skirts, which, I think, is the main reason why the wools are skirted. With wools grown west of the Mississippi River you do not have that, as yet, to Unless the skirting was carefully done, it contend with. would not be satisfactory, because some would either take off too much, making it unprofitable for them, or too little, making it unsatisfactory to the person who bought skirted wool.

# Marking.

"Marking with paint is a distinct disadvantage to the manufacturer, for the paint pieces have to be clipped off, which is a matter of expense and a loss in wool. We have lately had experience with some wools from Arizona on which a new marking compound was used, which they claimed was soluble in water. It remains soft and oozy, and our experience is that it is not soluble in scouring, and that the compound runs pretty nearly the entire length of the staple and damages the wool, so that unless some better compound can be devised, we would rather have the paint, with all its outs, that is now general in marking.

"If the wool growers will heed the foregoing remarks, and try to conform to same in putting wools up, I am sure that it will be a distinct advantage to them in securing a better price and putting them more on a par with their competitors.

## Wools grown in Australia.

"As you all know, the soil, feed, climate, and general environment have so much to do with the proper handling of the sheep that you could not expect, in this country, to raise wool as good as they raise in Australia, for instance, where the conditions — the climate and the enclosed stations, the grass feed and particularly the great care taken in breeding the sheep — produce different results from anything that could be obtained here, particularly on land west of the Mississippi River, where there is so much alkali in the soil, and especially on the range, where they depend often on sage brush for the food of the sheep, so that I am sure if you had the identical sheep from Australia, they would not produce the same results in this country, under the conditions I have named, but that is a matter on which a wool grower and sheep raiser is much better informed than I am.

# Grading.

"In regard to grading the wool at the ranches, I do not think this would be a success, because the grades vary on the market, and the wools raised in the Territories vary materially, one fleece from another of the same grade; and further, the wool is graded in the markets according to the demand for it, i.e., if there was a large demand for so-called three-eighths grade, the lower end of the half blood and the fine end of the quarter blood would be included as far as possible, and the same would apply as to other grades. Also, the wool being uneven in staple, what the clothing man would want would be one proposition, and what the comber could use would be quite another. If it were possible to have graders from the East at the different points in the West, I do not think it would be successful, as I have before said, to grade wools at place of growth.

## Baling.

"I understand there is some consideration of baling wools so as to save on freight rates. I believe that the grower would lose money by so doing. Of course, after wool has been baled and press-packed, it gives it an entirely different appearance from where the wools come in the bags, and if they were graded East, the fleeces in the piles made from presspacked bales would look like paving stones, and it would greatly detract from their appearance and value on the market. The latest information I have in regard to rates from a given point, as to whether the wool is baled or in bags, is about one-fifth of a cent in favor of the bales. At any such saving in freight, it would be distinctly preferable to continue shipping in bags. It was allowed, at one time, lightly to press three bags together and bind them with wires and have those come through at bale rates, but I understand the Interstate Commerce Commission has ruled against allowing that method to be considered as baling.

### Values.

"It has been stated that if our growers had the same sheep as in Australia and classed and graded them the same here, they would get the same prices for their wool. It is selfevident, on the face of it, that they would not, because here they could not produce the same kind of wools as they produce in Australia.

# Selling through a Local Organization.

"I have been asked if it would not be feasible to sell wool through a local organization. I do not think it would be to the profit of the average grower to do so. The grades being so different, wool does not lend itself to community-selling like fruit, and many clips are so small it would not be practical to grade them. Here is the proposition:

"There are the sheep growers; there are the wool merchants; and there are the manufacturers, each of them filling a very necessary and legitimate sphere. We all need one another. I suppose it is possible successfully to combine in one person a grower, merchant, and manufacturer, but I have never met him, and I do not believe he exists. There are manufacturers in our Association who buy wool direct from the grower, but in the main, my opinion is that the manufacturer does not consider it good business to do so. The different manufacturers, worsted, woolen, hosiery, and felt men, require such different kinds of wool it would be impossible for them to buy all kinds of wool in certain sections, whereas the wool merchant, taking them all for customers, can, and does, handle the wools so that he can make a legitimate profit out of it, and the different users get what they need at a proper price, when they need it.

"From all I can gather, I am thoroughly convinced that the wool grower is anxious to do all he can to put his wools up in better shape than heretofore, and he will aim to adopt the suggestions I have here put forth, within his limitations.

"I am also thoroughly convinced that the wool merchant is heart and soul in favor of the movement to adopt the best methods for putting up wool, and that he not only appreciates it by stating so, but in actual dollars and cents that he is willing to pay for the wool under different conditions.

"I am glad to see in the last issue of 'The National Wool Grower' that they have very clearly set forth the position on this subject, and I am sure we all appreciate what help they can give us in this matter.

"And last, but not least, we appreciate the help we will receive from the Bureau of Animal Industry in the reports they will no doubt circulate on this subject among the growers.

"We also are not unmindful of the efforts of the National Wool Warehouse & Storage Company along these lines."

#### QUESTIONS OF REPRESENTATIVE MONDELL.

In answer to inquiries from Dr. S. W. McClure, the secretary of the National Wool Growers' Association, and other representatives of the wool growing industry, Mr. Price expressed the opinion that what the Western wool grower most needed was to put up his wool on the lines that had been indicated, and not skirt his wools, not grade his wools, and not press-pack his wools. Then, in Mr. Price's opinion, the wool grower would get the most out of his product. In that way the wool buyers could deal with the native wools on an intelligent basis. They knew what the characteristics of the wool were from Wyoming, Montana, Nevada, and elsewhere, and could form an intelligent judgment.

Dr. McClure stated that he agreed with Mr. Price so far as the preparation of wools was concerned. Representative Frank W. Mondell, of Wyoming, who was present at the request of his wool-grower constituents, asked why the different conditions existing in the Rocky Mountain States rendered it inadvisable to adopt Australian methods there. His people grew wool to a considerable extent in large clips, and carried on the sheep business much as they did in Australia. They had grades of wool quite similar, many of them, to those in Australia. Mr. Mondell asked Mr. Price what was the difference in conditions that rendered it inadvisable or impracticable to do in the Rocky Mountain States as they did in Australia.

Mr. Price replied that after Mr. Ritch had delivered his address and explained all about how they handled wools in Australia, it would readily be seen that conditions under which they worked there were different from the conditions in the Rocky Mountain States. The Australian wools were very largely raised on stations, and elaborate preparations were made for the shearing, grading and classing of all the wools. The breeds of sheep in Australia were fairly regular, while in the Rocky Mountain States the grades were uneven.

Mr. John P. Wood, President of the National Association of Wool Manufacturers, emphasizing what Mr. Price had said, remarked that Mr. Price was urging that there should be a better preparation, but was advising out of his experience that an additional improvement by the grower beyond the point which he recommended would not pay the grower for the additional expense he would have to put on his property. Representative Mondell stated that the views expressed by Mr. Price were views that would more nearly accord with the general desire of the Rocky Mountain grower than the impression that some of them had had heretofore, of the advisability, amounting almost to a necessity if they were to get the best prices, of attempting skirting and sorting and selection, which under existing conditions would be almost impossible.

In answer to a further inquiry from Mr. Mondell, Mr. Price replied that he considered the present high price of Territorial wools as compared with Australian wools to be only temporary, a question of supply and demand — that the relative value of Territorial wools was distinctly less than the value of Australian wools, and that this was due to the breeding of the sheep.

#### ADDRESS OF MR. COSGRIFF.

At the afternoon session on Tuesday, June 2, the opening speaker was Mr. J. E. Cosgriff, of Salt Lake City, Utah, a conspicuous banker and sheep owner of his section. Mr. Cosgriff told how a sheep man from Wyoming once visited a mill of the American Woolen Company, and in the finishing room saw a young woman pulling out fibers from the cloth. He asked, "What is that you are taking out of the cloth?" The young woman said, "Those are particles of

the twine that Western sheep men use." The sheep man was astounded. He had never before heard of any objection to the twine, and he went to one of the officers of the company and asked him about it. That officer said, "Yes; I will show you a whole lot of it." He showed the sheep man several bushels. The visitor asked, "Is it a fact that these particles are all twine?" "Well, it is impossible to determine. Part of it might be particles of burlap or cotton, but we estimate it as nearly all twine." Then the officer of the Woolen Company added, "This is the most expensive department in the company."

So the sheep man thought about it and went away and visited a paper manufacturer and asked him if he would not make paper twine suitable for tying wool. The manufacturer said that he would, but added, "You cannot introduce it." Then the sheep man went to a manufacturer in Virginia and asked the same question. The manufacturer said, "We can make it, but it cannot be introduced." Then the sheep man went to the American Woolen Company, and to Mr. Harding, of Philadelphia, and several other woolen manufacturers, and they approved the idea of paper twine, and said, "But it cannot be introduced. The sheep owners are so stubborn that they will not use it." But the sheep man said, "I will try." He went to Rawlins, Wyoming, and called the sheep owners together and told them the story, and said, "You ought to use the paper twine." They asked, "Would we get any more for the wool?" He replied, "Not a nickel. It will never be recognized, but it is the right thing to do and we ought to do it." They used the paper twine, and from there it has spread all over the country. The day they said they would use it was the 9th day of November, 1909. It has made good progress since. Mr. Cosgriff's remarks at this point were heartily applauded.

Mr. Cosgriff went on to say that it was an acknowledged fact that sheep were diminishing in number in the United States, and that Western wool was deteriorating in quality. One of the purposes of this conference was to discover the reason and find the remedy. In the final analysis of any

business the expansion or development is determined by net profits and the direction of that development or extension is determined by the net profits. Another reason that the sheep are diminishing in numbers and deteriorating in quality is that the net profits are diminishing. Is it not a curious thing that one great political party of this country contends that a tariff is necessary for the development and protection of the industry; and is it not also curious that the other equally great party contends that it is not necessary, and that after we have experienced periods of free trade or protection, neither one nor the other is converted, and no one can yet say just which is right?

There is not any preparation of wool for market in America. There is a kind of preparation for sale, and as it happened this year there is a kind of preparation for delivery after the consummation of the sale and before the sheep are shorn at all. Neither the consumer nor the speculator, nor the agricultural college, nor the Department of Agriculture has ever given any practical aid in the preparation of wool for market.

The sheep man is the victim of an inadequate system. He is no more to blame than the American banker was because he could not stop the panic. In that case the American government had to take hold and advise something, and it should advise something that will uplift the sheep industry.

Now, what is the trouble with the industry? Mr. Cosgriff asked. Why has it not improved and why has the fleece deteriorated? It is the blanket system of buying the wool that is the cause of it all. The wool that was really worth 12 cents a pound has brought just as much as one that was worth 24 cents to the consumer. Now there is another evil creeping in. The wool growers in some sections in the West are banded together and pool the wool. They are selling it all at the same price. It is being marketed in eastern Idaho in that way. The man with the good clip gets no more than the fellow with the poor clip.

The remedy for this condition is the preparation of wool, at the source, for use. Nearly every great product in this country is prepared for use at the source. If our wool were handled as they handle it in Australia, at the source, there isn't any man that would say that it would not be cheaper to handle it there than it would be in the warehouses.

## ADDRESS OF MR. RITCH, OF AUSTRALIA.

Following Mr. Cosgriff, Chairman Rommel introduced Mr. W. T. Ritch, now of Salt Lake City, Utah, formerly of Australia, an expert wool classer, who is interested in introducing the Australian methods into the United States. Ritch, with the aid of a chart or plan of the Australian shearing sheds, described how the work was conducted. He said that the original idea of shearing the sheep by contract and handling the packed wool was to protect the flockmasters from annoyance by strikes during the season. It had been found to be very successful, particularly in New Zealand. The charge for shearing the sheep and classing and packing the wool in New Zealand is 12 cents a head, and the charge in Australia is 13 cents a head. In Australia the sheep are fenced in. This saved in lambing and in mating. When a number of breeds are turned indiscriminately into the flock, the result is not a good one. "Mobs" (a portion of a flock) of sheep in Australia are driven to the shearing sheds, and the ewes, wethers, yearlings, etc., are shorn separately. The sheep are driven slowly and by easy stages so that the yolk will not rise in the wool, and they arrive at the shearing shed calm and collected. The sheep are shorn at a time of the year when there is comparatively little volk in the fleece. When the sheep are driven to the shearing shed the owners do not want the yolk to rise on the journey because the wool would be sticky and any dust kicked up would cling to the wool and spoil it. But when they reach the shearing shed a quantity of yolk comes up and keeps the wool in good condition.

Mr. Ritch went on to describe the clean shearing floors of the Australian sheds, the wool grader's table, the wool classer's table, the bins, and the balers with a weighing machine. The men were usually called at 5 A.M. and the shearing commenced at 5.45, proceeding until seven o'clock when the men stopped for half an hour for breakfast, resuming again at eight and running until 9.45, when they stopped for half an hour's rest. Then they worked until noon, stopping one hour for dinner, resuming at one o'clock, and working again until 2.30, when they stopped for fifteen minutes. Then they worked on until four when they stopped for half an hour for afternoon tea. Resuming again they stopped at 5.30 for the day, and at six o'clock they had supper. Mr. Ritch explained that afternoon tea is a very important event to Australians—they are big tea drinkers and big tea drinkers are not heavy spirit drinkers.

A shearing crew in Australia has twenty-two shearers, one penning-up man, three sweepers, three fleece pickers, eight skirters and graders, four piece pickers, two pressers, one stacker, one machine expert and engine driver, one wool classer, one clerk and bookkeeper and one shed superintendent; a total of about fifty. The shearers would shear 200 a day and upwards on crossbred sheep, or 22 shearers would shear 4,400, at a cost of 13 cents a head.

The shearers in Australia are paid \$6 per hundred sheep. Boys employed in the shed for picking up fleeces are paid \$7.50 a week, and men \$9.25. Skirters are paid \$10 a week. Pressers are paid \$10 a hundredweight, or an average of 36 cents a bale, and their usual earnings are \$5 and \$6 a day. The shed superintendent receives \$25 to \$35 a week. The wool classer is paid \$6 a thousand sheep, and the clerk and bookkeeper \$15 to \$20 a week. A wool classer engaged for one year would generally expect from \$7,500 upward. The wool classer is a very important man in the wool trade. He would make \$115 a week, or \$6,000 a year, in even small sheds. The wool classer is a highly trained man, learning his trade from childhood. He would have to have a certificate before he could become a wool classer.

The only man who consults the wool grower in Australia is the shed superintendent. He will ask him, "How do you want your sheep sheared, close or medium?" This is the only time the grower is consulted, and the machine would

then be regulated to meet his requirements. The moment he returns the sheep order to the contractor, the contractor is responsible, and he has to deliver the material accordingly. When the work is performed the wool grower gets notice that his sheep are shorn and the shepherds send for their sheep. Everything is done perfectly. The reputation of the people depends on it. There is generally one losing shed in every three. They have some heavy losses too.

The light in the shearing sheds must be absolutely perfect. No shadow must fall across the sheep. Otherwise it is apt to make the shearer cut the sheep. The doors through which the sheep come are made with a double action hinge. They open inwards and outwards. Along the side of the door is the chute where the shorn sheep are passed out. Taking the sheep after being shorn the shearer goes up to the door, takes the sheep up carefully—the sheep are always standing close against the door—turns around and shears. Immediately the sheep is shorn it is passed down the chute, and goes to the individual catching pen. The shearer first shears off the belly wool. Immediately that falls to the floor it is picked up and put in a basket, and the wool boys take it, and then he commences to shear the fleece whole.

The fleece picker takes the fleece from the floor, rushes to the table and throws the fleece up into the air, parachute fashion. There are two men at each table, one on a side. The top of the table is made of revolving laths, made smooth by the motion of the fleeces, and always turning around, so that the sand and dust and dirt drop between the laths. While the fleece is on the table the fingers of the skirters are going like lightning, and their eyes are as keen as hawks'. As soon as the fleece falls on the table it is skirted. When the fleece has been skirted it is rolled. The faulty pieces and the coarse pieces have already been removed, so that there is nothing to be mixed.

The average working week in New Zealand and Australia is only five and one-half days. The men are working at high pressure and the machinery also needs a rest. It is also

necessary to stop from time to time and see that the shed is swept from end to end.

Grading is dividing the wool into different grades, according to quality. Classing is dividing the skirted fleeces, not whole fleeces, into different classes according to the length, quality, soundness, and condition. Mr. Hawksworth, who is considered the greatest authority in Australia, said in his textbook for advanced students that "There is fully three to four cents per pound difference in a classed and skirted lot of wool compared with one put on the market just as it comes off the sheep, making a difference of \$10 per bale. Also there is a difference of one-half a cent to one cent per pound between an unclassed lot that has been skirted, or from \$2.25 to \$4.50 per bale, in favor of the latter." Very often the enhanced price obtained for well-gotten-up fleeces will pay for all classing, rolling and skirting expenses.

The greater part of the wool in Australia — between 70 and 80 per cent — is sold locally, and not sent to London. It is checked, weighed, and stored in the lower floors of a warehouse until it is ready for sale. Wool in Sydney, for example, is shown in the morning, and the auction sale proper is held in the afternoon.

#### DISCUSSION OF AUSTRALIAN METHODS.

In the discussion which followed the address of Mr. Ritch, Mr. Jacob F. Brown, of Brown & Adams, Boston, representing the Boston Wool Trade Association, of which he is president, stated that wool could be handled, so far as classing and skirting are concerned, more cheaply in Philadelphia, Chicago, St. Louis or Boston than on the range. Mr. Brown added that there had been no demand for American wool in matchings, and it had never paid a dealer to put wool into matchings. Mr. Brown went on to say that when he bought in South America he bought in the general market, as in any other market. If he wanted to skirt the wool he had the skirters there take the skirts off at that time, class them, pack them and ship them. The skirts were usually sold in Germany. This year, he said, we bought wools in the open market, and paid for

sorting them and skirting them, but a great quantity was brought into America without any labor expended on it because we thought it was cheaper in the end for the manufacturer to sort that wool in America, with American wages — to sort it down as close as he could.

In answer to inquiries from wool growers, Mr. Brown said that he knew of one firm that had received anywhere from two cents to three cents a pound more for its wools than other wools brought in the same section. It was put up honestly. You could know about what it graded. If the growers thought the wool merchants did not take the best clips when they were buying, they gave them credit for very little judgment. The merchants certainly do pay more for any clip that comes in good shape.

Mr. Grundy thought that it was a fair statement to make that a great part of the wool bought from dealers or from those who were engaged in the handling of wool is bought on sample bags, tests of which are made before the purchase is consummated. It is an unvarying principle, regardless of how the results are arrived at, that wool is bought on a clean scoured basis. If a man receives sample bags and tests those bags, instead of relying on his judgment, and finds that there is an absence of various factors in the wool which would go to the discounting of it, he will pay a price which is sufficiently higher than the average price for that wool to make it worth his while to buy it. It is said that we do not go out and advertise, and say we are paying this price because the wool may be better put up. That is not a part of the merchant's business. He does buy that wool, however, on a scour price, and the grease cost on that wool is of no concern to him. If the statement be made that there is no recognition of the condition in which the wool is offered for the market, or that no recognition is given to the various good qualities of the wool, it is a statement that does not comport with the viewpoint from which the buyer purchases the product. buys for a clean scoured quantity. Any one who is familiar with the facts in connection with wool from the Civil War on will admit that there has been a recognized effort by the

manufacturers to encourage the putting up of wool in an honest and merchantable way, and it has been made clear that any departure therefrom is always at the expense of the grower, because those charges have got to be borne by him, as the experience with regard to wools of different sections is developed in the minds of the buyers. There has not been a conference from the famous conferences that were held in 1865 and 1866, generally attended by growers and manufacturers, but what this question of putting up wool in an honest way has been thoroughly gone over and encouraged by the manufacturers. All these costs of conversion from tags to the matchings receive the most careful attention, and the better the wools are put up, the higher the initial prices on the range or on the farm.

Mr. Brown, resuming his statement, said that he could get more per pound for wool packed in bags than for the same wool packed in bales. The difference more than offset the freight charges. A large amount of wool from the West had been contracted for by Boston dealers, and there is not a dealer that has stipulated that the wool shall be packed in square bales. No dealer would allow this if he had the chance to prevent it. Of course, the grower is not going to the expense of packing wool in bales, but if a grower asked whether we preferred to have the wool shipped in bags or bales, every dealer would say, "Ship it in bags." The tendency has been to ship in round bags as against bales, because some of the houses found that the wool sold better in round bags as against the established practice in Oregon, for instance, of shipping in bales.

In reply to questions from Mr. Cosgriff, Mr. Price stated that if wool were skirted and baled the manufacturer would gain and the grower would lose. The skirting of Territorial wools would be an unprofitable venture. If wools were baled it would make them appear when they got on the market that they would shrink 2 or 3 per cent more.

Mr. Price, at the resumption of the conference on Wednesday forenoon, spoke again of skirting Territorial fleeces. "Let us assume," he said, "that west of the Mississippi

River there were 150,000,000 pounds of wool produced. Of that 150,000,000 pounds, two-thirds, or 100,000,000, is fine medium to fine and so-called half blood. The average shrinkage would be 68 per cent. Take the 68 per cent shrink wool and skirt it, taking off, say, 10 per cent. Now 75 per cent of the wool taken off would be worth just as much scoured as the 90 per cent that was left. There are not the same conditions to contend with in this country as in Australia. There they have the burr. In the case of the wool that shrinks 68 per cent, the 10 per cent that was rejected would shrink about 75 per cent. That would reduce the shrinkage of the 90 per cent that was left threefourths of 1 per cent. If one fleece that would shrink 674 per cent were put on the table and another alongside that would shrink 68 per cent, no expert in the United States could pick it out. What happens to the 10 per cent? A fair guess is that it would bring about 50 per cent of what the regular fleece would. It would be to the distinct disadvantage of the grower to skirt his Territorial wools as wools are skirted in Australia, and the manufacturers were friends enough of the growers to tell them so.

### AS TO STANDARDIZING COTTON.

Dr. Nathan A. Cobb, Crop Technologist of the Bureau of Plant Industry of the Department of Agriculture, was introduced by Chairman Rommel to describe what had been done about solving the problem of standardizing cotton. Dr. Cobb stated that the problem had not been wholly solved, but that a good beginning had been made and that upon this there is little doubt that there will be built a complete and satisfactory system of cotton standardization. The matter had to be considered not only from a theoretical but from a practical standpoint. The fundamental principle adopted was that the industry itself should determine every principle, every basic part of that which was to be accomplished. Representative men of the industry were carefully selected, every one of them at the head of a big business. They were asked by the Secretary of Agriculture to represent not their

firms or their branches of the industry or their exchanges or their portions of the country, but the whole industry, and they accepted their commissions on that basis. They came to Washington and gave their services free of charge.

Congress in its wisdom named nine grades of cotton that were to be prepared by the Secretary of Agriculture. The gentlemen whom the Secretary had called in council advised him of American opinion with regard to those nine grades, and submitted their report in the form of a set of samples. The Secretary accepted their report, and then came the very important matter of making this basis, which had been secured from the industry itself, the means of building up a system of cotton classification or standardization. If the government took hold of a proposition of this sort seriously, it would not do to consider the thing from the growers' standpoint or from the merchants' standpoint or from the manufacturers' standpoint. A government department handling a problem of this sort has to consider the welfare of the whole people.

The elements of the classification of cotton, like the elements of the classification of wool, are extremely simple. All the principles that enter into the classification of cotton are contained in a single fiber of cotton. The color of a mass of cotton is due to the color of the individual fibers of cotton. The strength of the yarn depends on the strength of a single fiber—not only the actual tensile strength of that fiber, but the way that fiber would bind together with other fibers. There is no such thing as a weak point in the cotton fiber, but if sheep go through a storm and suffer because they cannot get food enough, of course that makes a weak place in the wool and it breaks at that point. There is no such thing in connection with cotton.

The cotton bale is a very much worse thing than the bale of wool. A great deal of wool, especially that of foreign countries, is baled in good shape. The cotton bale was the worst package of produce in existence. What we are working for, said Dr. Cobb, is a length standard. We have actually made a length standard, and it is in process of being

issued at the present time through the Bureau of the Census to the cotton mills of the country as a basis for their returns to the census for the amount of cotton of different lengths that they are using. Once there is a grade standard which covers the color and foreign matter, and a length standard which covers the average length of fiber in a bale, the cotton can be classified where the primary package is made. When that can be said in regard to cotton, it is a good deal like saying what the Australians say in regard to their wool.

#### ADDRESS OF DR. McCLURE.

Dr. S. W. McClure, the secretary of the National Wool Growers' Association, explained that President Hagenbarth regretted that he had to be absent from the conference, but that he assured the Department of Agriculture and all interested in the matter of his cooperation in anything looking to the bettering of the conditions of the industry. Dr. McClure said that all that was necessary to bring about a better preparation of the American clip was recognition on the part of the final user of the wool, the manufacturer, of the merit found in the system of preparation. The wool grower has been very careless; there is no question about that. But he is no more responsible for this condition than is the wool dealer or the manufacturer — not nearly so responsible as the wool dealer. Dr. McClure expressed the opinion that no improvement in the character of the clip could come about until the American manufacturer was willing to come and do business with the man that raised the wool. But he did not mean that the dealer ought to be eliminated. always been necessary that there should be wool dealers in the country. They will always handle a large part of the American clip, but the cooperation of the manufacturer is desired in the purchase and handling of the wools to the extent that he is willing to come out on the range and buy his wool at first hand from the sheep man.

The permanency of the tenure of land in Australia was an advantage over the United States. In this country a sheep man cannot know how long he is going to be in business.

He is hanging on from year to year, using a range this year that next year may be used by the homesteader or by some other sheep man. Our government has failed to give the Western sheep industry the essential permanency that has made the sheep industry possible in other great wool-producing countries of the world. To-day the man who is using a range in the national forests is the only sheep man in the West who knows he is going to be in business very long. This Forest Service, misunderstood at first, is the best thing that ever happened to the Western sheep industry.

Aside from the long lease law, the next benefit of the Australian sheep grower was the wool market in which he sold his product. He had his Sydney wool exchange and his London auction. In other words, the Australian always had an open market for his wool. It was put up and sold fairly and squarely to the highest bidder. There is no such institution in the United States. Every now and then buyers come out West. If we are willing to take what they offer, they are willing to buy our clip. If we are not willing to take their price there is nothing left except to consign the wool to Boston. When it is sent there you have no idea within two or three cents a pound what it is going to bring in Boston. In fact, it may stay in Boston a year before it is sold. In Australia a wool grower sends his wool to Sydney, and there is a man there from Japan and one from Germany, perhaps one from Austria, one from France, a dozen from England and a dozen from this country, all bidding for that clip of wool, and it necessarily follows that a man who has placed his wool in a position which best suits the need of the manufacturer is bound to have that merit recognized. Wool is being bought here under the same wool contract that was used twenty-five years ago - it is this old contract, and contracting for wool on the sheep's back, that have demoralized the American wool industry.

Representative Hatton W. Sumners, of Texas, asked Dr. McClure if in his judgment there was as much competition among the wool manufacturers as under proper marketing conditions one would expect to find? Whether an organi-

zation could be formed that could guarantee the class of wool which it purported to sell? Was it possible to standardize a wool so that it may be sold by standard grades, and what would the Federal Congress or the Department of Agriculture do in the way of systematizing their business and bringing it in conformity with their laws?

Dr. McClure in reply highly praised the work of the National Wool Warehouse, of which Mr. Cosgriff was the first head. It has established the fact that the American wool growers could market their wool, and that manufacturers would come and buy it from them. Western wool growers had profound confidence in the Bureau of Animal Industry. Relations with the Forest Service had been good, and confidence in that service had been established. But the wool industry had never received proper recognition from Congress. Two or three experimental breeding farms should be established somewhere in the West, under the Department of Agriculture and in cooperation with a board of governors selected by sheep men. At these farms a method of technical education where men could be trained in handling and breeding should be established. A public wool anction would be beneficial. If the manufacturers would come out West and buy the wool at public auction, and have such auctions in Chicago and Boston, it would be a wonderful step in advance.

Dr. McClure in closing said that as to the Australian system he was disappointed at what the manufacturers had said, but he wished that the Australian method could be established, at least experimentally on a small scale. If the net benefit resulting were only a cent a pound it would mean a million and a half dollars west of the Missouri.

Mr. Hugh Sproat, of Boise, Idaho, representing the Idaho Wool Growers' Association, endorsed what Dr. McClure said regarding the wool warehouse, the land question, etc.

### ADDRESS OF MR. THOMSON.

Mr. Robert B. Thomson, vice-president of the National Wool Warehouse & Storage Company of Chicago, expressed

approval of the work of the Department of Agriculture, and agreed with what had been said to the effect that the growers' interest and the manufacturers' interest were one. But Mr. Thomson added that there was another interest represented that was antagonistic. We have got to get from the source of production to the consumption point in order to find our solution.

The most serious question for the consideration of the conference, in his judgment, was the large decrease in the flocks in the inter-mountain range States during the past few years. Careful investigations indicated an approximate decrease in the past two years as follows:

Montana,	about	40	per	cent
Wyoming,		20	"	44
Idaho,	4.	10	"	66
Utah,	"	15	"	"
Oregon,	"	10	44	44

One phase requiring especial attention was the tendency toward the wholesale marketing of ewe lambs. The principal market centers showed a decided preference for lamb over aged mutton, and this had been met by growers marketing 75 per cent lamb as against 25 per cent mutton. While an open market for mutton and lamb enabled producers to have a fairly accurate idea as to the value of their flocks at primary shipping points, no such condition prevailed as to wool. The steady deterioration in Western range wool by reason of lack of intelligently directed breeding had been widely noted, and unless methods were adopted to bring about a change in this respect further damage would ensue, as well as a continued decrease in the amount produced.

Mr. Thomson suggested that the Department of Agriculture give its attention to a survey of the Western range States, with a view to determining the practical adaptation of several well-known mutton and wool breeds of sheep to range and climatic conditions of the various sections, and that the Department prepare acceptable standards for grading Territorial wools, the grading to be supervised by the De-

partment. The Department also should bring about a more or less open market for American wool. Under the present speculative way of buying wools in the West, dealers had decided advantages over the producers in marketing the wool. The buying of wool in the Western country from year to year was an encouraging occupation for speculators, with more or less demoralizing results to stable values in the East, enabling individuals, by reason of having purchased wools cheaply before they were shorn, or in remote localities at less than their market value, to sell their holdings in Eastern markets at a range of values calculated to render impossible close estimates of values, thus making wide fluctuations in quotations upon a great industrial product, whose producers should be able in some way or other to know its value more clearly.

#### MR. PRICE DEFENDS THE WOOL TRADE.

Believing that various Western criticisms of the wool merchants of the East should not go unanswered, Mr. Price, following Mr. Thomson, arose and said:

"Mr. Chairman, I hold no brief for the wool merchants of America. I know intimately the Boston wool trade for the last thirty odd years. A more brainy crowd of men with absolute integrity does not exist on this earth. I know that from my connections with them. With regard to their being thieves and frauds and going out and buying the poor grower's wool, look at the chances they take. In the winter the sheep can be driven through a sand-storm and the shrinkage raised 10 per cent. In the main that is not done. give the wool growers credit for that. They give the wool buyers a square deal. What was done last winter when a lot of wool growers wanted money, when none of us in the East knew what the wool was worth? These men took a chance and went out in the West and bought wool at prices that apparently to-day seem cheap. They are going to make a profit. They have a right to it. They took a chance and the market has turned in their favor, and, as I say, they are going to make a profit.

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"Why shouldn't they? Suppose the thing had gone the other way? Suppose the market had gone down, which was what every manufacturer expected last winter? There isn't a manufacturer that I know of in this land that would have put his money into the wool at the price at which the wool man bought it last winter. Now what is happening? Here we have wools at about three to four cents a pound higher than was then moving in the West, particularly in the Territories, last winter. What is the result? There isn't one manufacturer that would be willing to-day to own the wool at the prices the wool dealer is paying for it.

"Take my advice. It is bad to prognosticate unless you know, but I will risk my future reputation on this statement: Let the National Wool Warehouse Company and all you gentlemen from Wisconsin or Virginia or from whatever section you come go home and urge your growers to sell their wool to any one who will pay an approximate price to what they are paying to-day, for I am confident that inside of six months the prices of native wool will be lower than they are to-day, and I am pretty confident they will be inside of ninety days. The prices are abnormal. The market is on a basis where there are no native wools. We were in the middle of the season and the manufacturers were so placed that they had to have the native wool to piece out with. Now, in starting another season do you suppose that they are going to pay from 10 to 20 per cent more for native wool just because it is native wool as against superior wool that can be gotten from other sources?

"The manufacturers have got to look out for themselves and the wool grower has got to look out for himself. I have considerable business both in Chicago and Boston with the National Wool Warehouse Company. You have Mr. Cosgriff's endorsement of me yesterday when he said I was a fair man. I think I am correct in saying that of the 150,000,000 pounds of wool produced west of the Missouri River there has been no year where they have controlled and handled over 25,000,000 pounds. That is one-sixth of what is produced in the West. Now if the Wool Growers' Associ-

ation is a proper thing for the wool growers to have, why did they not patronize their association? There are many reasons why they did not and one is the question of finances. The National Wool Warehouse Company could not finance the handling of 150,000,000 pounds of wool; neither could any wool dealer or several wool dealers in Boston, where they do much business. Therefore, they have to have the wool man. You cannot eliminate him. If he does not handle the native wool, he will handle some other kind. As far as giving the wool growers a square deal is concerned, he is giving them more than a square deal."

Mr. W. B. Doak, of Virginia, suggested that American farmers and sheep growers were under a great handicap, as compared with the farmers and sheep growers of Australia, in the matter of credit. The farmer in New Zealand could go to the post-office and get his money at  $2\frac{1}{2}$  per cent. The Western sheep men paid 8 per cent.

Mr. Wing, of Ohio, confirmed what Mr. Doak had said, and stated from his own knowledge of Western sheep growers that 90 per cent of them were in debt. One man put it in this way. He said, "I have 10,000 ewes, and I suppose they are worth \$50,000, but if I had \$50,000 what would I want with any sheep?"

### ADDRESS OF MR. BOULDRY.

Mr. John R. Bouldry, of Boston, of the editorial staff of the "Boston Commercial Bulletin," said that there is no combine in the wool trade of this country. It has been impossible to have such a thing. There is a chance for free competition, and that has always been the case. Now the history of the wool trade in Australia from the time that wool started to be grown there has been this: Wool has followed money. It has followed the financial leaders, the men located in London. That is the reason why the London wool sales were established in the first place. That is the reason to-day why wool goes to Boston.

There are the natural advantages of New England for manufacturing purposes which make Boston the market

point, but the money which buys the wool comes from Boston and the wool grower must not lose sight of that fact. If he has not the money to finance his clip he is unfortunate, but that is not the fault of the Boston wool dealer, and it is not the fault of the New England manufacturer. It has been the wool grower's misfortune, and all sympathize with him, and all would like to help him improve his clip so that he can get whatever benefit there is possible from the improvement.

It has been suggested here that none of the Boston wool merchants this year desire to have consignments of wool; that they prefer to purchase it and take a chance on the That is not true. There are men in Boston that have scarcely bought a pound of wool because they feared the high prices, and because they considered the market was only an abnormal one at the present time and was bound to be lower on domestic wools because foreign wools could be brought in at a lower price. None of the wool growers could have foreseen that their wool would bring any such prices as they are now realizing. It has been only supply and demand, which is abnormally balanced or unbalanced, and calls for high prices of domestic wools at the present time. The wool grower will get more money for his clip if he is able to put it up in better shape — if he will eliminate the elementary faults or deficiencies, which he has succeeded in doing in a measure. If he does that the effort will be recognized by the Boston wool trade because there is open competition in buying. As to open wool auctions, such as are held in Australia, some years ago in New York an attempt was made to establish wool auctions. It absolutely failed. Australia and New Zealand have their open auctions, it is true, but two years ago the English wool merchants went down into New Zealand and purchased wool on the sheep's back before it was shorn, just as they do in the West, which only illustrates the point that it is finances that in the long run control the situation. If the Western wool growers were as well financed as the wealthy land owners and sheep growers of Australia, they could hold their wool to meet the market in just the same way the Australian holds his wool.

No one in the wool trade cares to see the clip diminished or reduced to the minimum. The wool manufacturer and the wool dealer least of all want to see the wool clip cut down. They want to see it increased because it is needed. The Orient is calling constantly for more wool, and the wool grower is going to see a better market. It is to be hoped that the conference will result in good to the grower, and that the industry may be increased.

#### ADDRESS OF REPRESENTATIVE SUMNERS.

Congressman Sumners, who said that he was a representative of the "Farmers Grange," an agricultural paper of the Southwest, said that it was the most natural thing in the world to abuse somebody for not doing something that ought to be done, or for doing something that ought not to be done. But the fact must be recognized that the middleman existed because he was needed. Nature nowhere tolerates a thing that is not needed. In order for the producer and consumer to eliminate any part of the expense they must construct the machinery which eliminates the necessity. If wool can be standardized, wool ought to be sold at standard and it ought not to be shipped to concentration points and then reshipped. If it cannot be standardized it has got to be sent to some place where it may be sold.

Years ago every farmer had a little bunch of sheep and clipped his own sheep. The wool went to the local carding machine and the old family loom made it into the clothes that the folks wore. At that time practically everybody lived in the country. It must be recognized that an industrial revolution has come; that with the application of steam and electricity half of the people have moved to town, and the farmer has not been able to bring his business into conformity with the other businesses of the country. The manufacturer organizes the producing and selling end of his business, and when he puts his product on the market he knows the cost of the raw material and the cost of manufacturing. The producer when he comes to trade with the manufacturer is

asked first, "What is your product worth?" The producer trades on a price fixed by the other man.

The people who live in towns should render to the men who are out in the fields every assistance. They ought to recognize that these men are raising the materials and producing the materials we use for clothes, and be able to help them. If a benefit is to come from this conference some constructive work must be brought about. There is no use in abusing the other fellows. They come out and trade with us. They do not force us to take their money. We trade with them because we think they offer the best trade that can be had. We must turn back this tide of population that is sweeping from the country into the towns. The people in the towns must pay the country boy just as much for staying out there as he could get by going to town.

Mr. Wing, of Ohio, said that the Department of Agriculture could do a great deal, and it should have some money to bring over to this country fine breeds of sheep for experimental purposes. The sheep industry has received a blow in connection with the tariff. There is no doubt about it in the world. Perhaps it is wise, considering all the American people, that it should receive this blow, but the sheep men have a right to ask Congress to do all it can to put the industry on a good footing. The Eastern wool grower can keep his sheep cleaner than he does. When the yards are muddy he can keep them in the barns. He can shear his sheep earlier, and he can instruct the shearers to put nothing in the fleeces but good wool. In England there are local wool markets and there is no reason why there should not be these markets here.

#### ADDRESS OF REPRESENTATIVE MONDELL.

Representative F. W. Mondell, of Wyoming, stated that he was present at the request of the wool growers' association of his State. He said that Congress made a small appropriation to encourage the importation of high grade sheep. He had no doubt that a majority of the Western wool growers would be inclined to favor the view advanced by

Mr. Price as against the view of Mr. Ritch, because the former represented the easier way, and it seemed to him that the wisest course must lie between the view taken by Mr. Price and possibly the extreme view that in the Western range country everything can be done that is done in Australia in preparing wool for market. The man who produces an article most nearly finished for final, actual use by the consumer is the man who usually makes the largest profit. The seller of raw material is always handicapped, but the Western wool industry was under a great debt of obligation to Mr. Cosgriff for his introduction of the paper string, and that he had public spirit enough to have Mr. Ritch come over and show how they do it in Australia.

The permanent land tenure gives Australia a great advantage. There has never been a time in the territorial wool situation that it has not been in a transitory stage. The thought has been to put the farmer on the land, and the people have steadily and constantly evaded any leasing system which would establish a condition of permanency to the stock industries. When Western farmers were chided for not having prepared their wools as well as they should, the conditions under which they live must be remembered. industry is being carried on in a region undergoing an evolution of ownership and of settlement. It may be true, as Mr. Price has said, when you come to measure the extent of improved methods of better preparation and better care, and balance it with the price received, it may not in every case be an advantage. While there is no immediate benefit, if a majority of flockmasters can follow this method ultimately the price of wool will be higher, because if the entire product is better it will command a higher price. There must be missionaries, though, these John the Baptists, these men who improve methods without getting any direct and immediate benefit.

Another serious difficulty is that the American farmer, except in Eastern thickly settled communities, is handicapped in the method of financing his operations. Something must be done in the interest not only of the wool grower but of

every other man in agriculture and farming to make it possible for him to get his money cheaper. It is not a simple problem. It is difficult by reason of the enormous extent of our territory and the rapid growth of our industry.

Mr. Doak, of Virginia, Mr. W. H. Cleaver, of Pennsylvania, and Mr. P. J. Stevens, of Wisconsin, spoke of wool growing conditions and the outlook in their States. Mr. Wing, of Ohio, said that there was money in the sheep business with wool as low as it is, and that in his opinion there never was a better time than the present for going into the sheep business on the Eastern farm, provided the sheep are not beaten up by dogs, and provided the grower knows how to feed mutton lambs and keep them clean and get what he can for the fleece. Mr. Wing said that during the four years he was in the service of Uncle Sam going from farm to farm to ascertain the revenues of sheep owners, he never found a man who was not making money who grew mutton lambs and fed them well, and he found but few men, he was sorry to say, before the tariff was removed, who were making money by relying upon the wool.

Mr. Magnus Brown, president of the Minnesota Wool Growers' Association, described the work of his association, which maintains a warehouse and sells wool brought in from all parts of the State. Mr. Brown complained that so far as furnishing data and showing where one clip was superior to another, he and his associates had yet to get the first word of assistance from Eastern manufacturers.

Mr. A. F. Potter, Associate Forester, Department of Agriculture, spoke of the work of the Forest Service in protecting the flocks against predatory animals. Dr. A. K. Fisher, Assistant in Charge of Economic Investigations of the Bureau of Biological Survey of the Department of Agriculture, spoke on the same theme, as did Mr. Hugh Sproat, of Boise, Idaho. Miss Julia M. Wade, secretary of the American Shropshire Registry Association, spoke of the damage and destruction to flocks of sheep by dogs. Mr. F. R. Marshall, Senior Animal Husbandman in Sheep and Goat Investigations of the Bureau of Animal Industry of the Department of Agriculture, discussed the same topic.

## MR. BATTISON'S PAPER ON WOOL STATISTICS.

A paper describing the methods of compiling the Annual Wool Review of the National Association of Wool Manufacturers, prepared by Mr. William J. Battison, of Boston, Statistician of the Association, was presented as follows:

"Many years ago it was the custom of the Department of Agriculture to prepare from year to year a statement showing the number of sheep in the United States and the annual wool product. This was the custom when the statistical bureau of the Department was under the supervision of the late J. R. Dodge, a man thoroughly informed as to the peculiarities of the wool growing and sheep raising industry.

"During the latter part of Mr. Dodge's service in the bureau Mr. Joseph P. Truitt, of Philadelphia, a member of the firm of Thomas Dolan & Company, wool spinners, commenced making a similar estimate for his own use.

"His work came to the attention of Dr. S. N. D. North, then the Secretary of the National Association of Wool Manufacturers. At about that time Mr. Dodge discontinued his work, and as Mr. Truitt did not care to continue his statistical efforts, it seemed advisable that the National Association should undertake the gathering of the statistics in order that there might be a report on the wool product of the country disinterestedly prepared for the information of all connected with the growing, dealing in, or manufacture of wool.

"As I had been for years attending among other things to the statistical work of the Association, this task naturally devolved upon me, and I may say that in the twenty-five years during which it has been a part of my duty to prepare this estimate I have never felt fully satisfied with the results of my efforts, and am glad that this work is again to be undertaken by an agency that has ample facilities and abundant means, so that when the facts are collated and the results published the report will not only bear the stamp of official authority but have added weight as the outcome of careful inquiry by the agency the best fitted to conduct it, unless, indeed, an actual enumeration of the flocks could be made,

and the amount of wool sheared ascertained each year, as is now done by the Census Bureau for the cotton crop.

"The methods which have been followed by the National Association have for a starting point the United States decennial census reports — that is, the enumeration of sheep in the various States and the wool product as reported. 1900. I think for the first time, the sheep and lambs were separately reported, and this was done on the suggestion of the Association.

"The Federal Department of Agriculture has annually made an estimate of the number of sheep in the country as of the first of January, using the census report as the basis from which to start, and adding to or subtracting from the numbers there given such a per cent as the reports of its local correspondents indicated to be necessary to correct the enumeration up to date — that is, adding or deducting from vear to year in each State or Territory so much per cent as the increase or decrease appeared to be.

"These estimates I understand were adjusted as soon as possible after the next following census figures became available, and then a new start from the revised figures was made.

"The number thus ascertained from year to year by the Department has been carefully used in our estimates, as also have been the reports made by the Department showing the losses sustained by the flocks from disease, inclement weather and other causes, and in our ascertainment of the number of sheep for shearing allowance also has been made for the annual slaughter for food purposes of sheep and lambs.

"Here you have the principal official sources of my information, and, as you see, the only figures showing the actual number of sheep are those of the Census Bureau every tenth year; nearly everything else is an estimate having those figures for a foundation.

"A number of the States ascertain as accurately as possible, for the purpose of taxation, the number of sheep within their borders, but more do not, for as a rule sheep are not taxed. State reports have been used as far as possible, as a check upon the various estimates. The officials in some of the States, however, in which sheep are assessed express doubts as to the accuracy of their reports, believing them to be only partial. The whole question of the number of sheep in the country and consequently of the volume of the wool clip has been necessarily largely a matter of estimate, and in the reports of the National Association pains have been taken to emphasize that fact.

"It has been the custom of the National Association to send to the officers of the wool growers' associations, to individual wool growers, to dealers and manufacturers in all parts of the country, and to all the State agricultural departments, bureaus, sheep commissioners and experiment stations a circular letter annually, containing the results of the previous year's inquiries, with some other interesting statistical details bearing upon the industry, and asking for such information as could be given respecting the total number of sheep, their increase or decrease during the year in localities with which our correspondents were familiar; changes in the breeds of sheep kept; weight of fleeces as it was known to them and the loss in shrinkage, from the greasy condition as shorn, to the scoured state. Replies to these questions were tabulated so far as possible, and by averaging the returns a basis has been reached for the various calculations necessary to obtaining the result.

"Boston, as you all know, is the great wool market for this country. Her dealers have their agents all through the wool raising districts. Some operate mostly in certain localities and some in others, but taking them together, as they are able each for himself to form a pretty close opinion of the quantity and condition of the wool coming from the sheep in various parts of the country, by collating their information the amount of the total product of the year can be fairly well approximated.

"Before the results reached by the Association's canvass are published, the preliminary figures have always been submitted to many of these gentlemen for examination and criticism, the various items have been carefully gone over and the final result not reached until it appeared that the totals were as nearly correct as the conditions allowed. The outcome of all this care and scrutiny is that the reports have been accepted by the trade generally and by the statistical officials of the government as a fairly accurate estimate of the total wool production. Indeed, a letter dated November 29, 1913, from this Department to Mr. Winthrop L. Marvin, Secretary, commended this work of the National Association in these terms:

"'The Department of Agriculture has not attempted to estimate the annual production of wool, largely because such work has been so well handled by your Association. If it is your intention to discontinue such work, or if it is your desire that the work be transferred to this Department, the subject will be carefully considered by the Bureau of Statistics and the Division of Animal Husbandry of the Bureau of Animal Industry of this Department.'

"There is one point that has been passed in this brief survey of the methods pursued in making this estimate - that is, the question of the pulled wool product, which is very considerable in amount. Pulled wool is the wool taken from in estimating the wool product of the United Kingdom to take the numbers of sheep reported as of January 1 in each of the several shires or counties, multiplying them by the average weight of fleeces in the same localities, thus securing a total for the country. From the total thus reached a quantity assumed to be equal to the difference between what the slaughtered sheep would have produced if sheared at the usual time and what they did produce at the time of slaughter is deducted, and the remainder is taken to be the wool product for the year. The method pursued here has been the reverse of that, so far as the quantity of pulled wool is concerned. As good an estimate as possible has been made of the number of wool producing sheep at shearing time, say April 1, as some date must be fixed, and the number for each State has been multiplied by the average weight of fleeces for that State. The total of all the States gives the quantity

of sheared wool. To this total is added an amount for wool taken from skins by wool pullers, whose business it is, equal to a fair estimate of the wool taken from slaughtered animals, which, of course, averages less per skin than a year's growth, because the lambs have not reached that age and the older sheep killed during the year have only so much wool as has grown since the last shearing.

"In getting at the figures for slaughtered sheep and wool per pelt information is obtained from slaughtering establishments as to the number of lambs and sheep killed and of the wool secured, and further allowance is made for the killing by butchers and on farms for family use. The government reports of the shipment of sheep to the great cities are also considered in making the account.

"It is plain from the foregoing statements that the figures published annually of the wool production of the country are what they have always been called, 'an estimate,' and nothing more; but it is an estimate honestly and carefully prepared according to the best information we have been able to secure.

"Although these annual figures are frankly estimates, as they have been made from year to year on the same plan and built upon the same foundation, they afford opportunity for a fair comparison of the relative amount of the wool production of the country from time to time.

"Since making the last report a number of the great railroads handling wool have furnished confidentially official figures showing the quantity of wool shipped over their lines. These figures were received too late for use in the last statement, and as they do not cover all the railroads they are not so valuable as complete reports from all roads would be. Perhaps it may be possible for the Department in the future to secure full returns of wool shipments, and if so they would prove an admirable check upon results otherwise obtained.

"As the shearing camps or stations become more and more localized and enlarged, it may be possible to secure from those in charge a statement of the number of sheep sheared

and the wool taken off at each one, thus adding another check upon the computation, based upon numbers.

"I have thus briefly outlined for your information the methods pursued; have referred to some of the difficulties surrounding the effort in years past, and have offered a suggestion or two for the future, and you will permit me to say that it is with much gratification that I contemplate the transfer of the work to a department of the government which, backed by official authority and having much greater facilities, will surely be able to present a report which will be far more complete and accurate than can possibly be made by a private organization, and which will be accepted without question by all concerned."

#### REPORT OF THE CONFERENCE COMMITTEE.

Dr. S. W. McClure, secretary of the National Wool Growers' Association, and chairman of the committee of five appointed to draw up a statement of the work of the conference, submitted his report as follows:

### " To the Honorable, The Secretary of Agriculture:

"The sheep industry of the United States, according to the last census, was valued at approximately \$230,000,000. The sheep industry obtains to some extent in every county of the Union. It is of vital importance to all the people of the United States, for not only must our nation depend upon the sheep for a large part of its meat supply but the best part of its clothing must always come from home-raised sheep. It is generally admitted that our supply of sheep is rapidly decreasing and the indications are that a still further decrease seems probable. Under these conditions you have called this conference to consider the economic problems that are unfavorably affecting this great industry. For this recognition on your part the flockmasters of the country are deeply grateful, and beg to assure you of their hearty cooperation in carrying out every reform that would seem to offer a solution of these problems. Among the subjects considered by this conference and the conclusions reached by the delegates are the following:

"A careful estimate indicates that approximately \$15,000,000 worth of poultry and live stock are annually destroyed in this country by the depredation of predatory wild animals. In the Western States, on which most of this burden falls, the great percentage of these predatory animals are bred and raised on land properly withdrawn from settlement by the Federal government. This condition makes it impossible for the State or individual successfully to eradicate these pests. Under such conditions those interested in our animal husbandry feel that the nation should assume its just share of this burden through a system of national bounties.

"In the farming States, thousands of sheep are annually destroyed by dogs and this menace keeps many farmers from taking up sheep husbandry, thus reducing the nation's supply of meat and wool. There is a pressing need for better legislation on this subject in many of the States, and we respectfully suggest that the Department of Agriculture could materially assist in securing such legislation by giving this movement its moral support in every way possible.

"At the present time, we have in the United States no generally accepted standards for the determination of the various grades of wool. This lack of standardization makes it impossible for the wool grower to know the grade of wool he is producing or the value of it in the market. We feel that if our wool was standardized into grades intelligible to the grower it would encourage him to produce a better quality of wool and would do much to place the entire wool industry on a higher and more satisfactory plane. We appreciate the most useful work done by the Department of Agriculture in the standardization of cotton, and we urgently petition that at the earliest possible moment your Department will take up the matter of standardizing wool. We appreciate that considerable time must elapse before a perfect standard of grades can be generally adopted, but we believe that in a relatively short time temporary standards can be

established that will prove acceptable to the wool grower from an educative standpoint and useful to the entire wool trade. We therefore hope that before our next clip is marketed the grower may have before him a set of standards generally acceptable to the wool interests of this country.

"There seems to be a general impression that in quality and character the wool of the United States is declining, as it certainly is in quantity. Probably several factors contribute to this result, but undoubtedly an important cause is that in the past few of our agricultural colleges or the Department of Agriculture have given wool growing or sheep breeding the consideration that the importance of the industry merited or the encouragement that foreign governments have extended Wool growing is a science that to their sheep breeders. requires not only the sound judgment of practical breeders, but the technical knowledge possessed by the trained expert. We therefore appreciate that under present conditions there is immediate need for the establishment of government sheep breeding farms, one of which shall be located in the intermountain States and another in the central part of the United States, where, under supervision of experts, experiments may be conducted to determine what type of sheep produces the most desirable quality of wool and is best adapted to the conditions existing in the various parts of the territory concerned. Under the direction of these experts, a survey of the country could be made to ascertain the character of sheep husbandry most suited to each locality. connection with this government breeding farm, we would urge the maintenance of a wool college where a short course in wool, wool growing and sheep breeding would be available to those connected with our sheep industry. Such institutions as these would stimulate interest in wool growing and would be reflected in an increased production of wool and sheep and a material increase in the character and usefulness of American-grown wool. The urgent need of such institutions leads us to ask that every effort be made to establish them in the near future.

"In order that those interested in this conference may

derive the fullest benefits therefrom, we suggest that a copy of the proceedings of this meeting be printed and distributed to the delegates in attendance.

"S. W. McClure, Chairman,
Secretary, National Wool Growers' Association, Salt Lake City, Utah.

"W. C. Coffey,

Agricultural College, University of Illinois, Urbana, Ill.

" MAGNUS BROWN,

President, Minnesota Wool Growers' Association, Farmington, Minn.

"ROBERT B. THOMSON,

Vice-President, National Wool Warehouse & Storage Company, Chicago, Ill.

"J. E. Cosgriff,

President, Continental National Bank, Salt Lake City, Utah."

The statement was duly adopted by the conference.

### A NATIONAL WOOL EXHIBIT.

In connection with the conference, near by the meeting room in the National Museum, the Department of Agriculture presented a very interesting exhibit of wool and wool manufactures. This exhibit was in charge of Mr. Lewis L. Heller, Junior Animal Husbandman in Sheep and Goat Investigations, who had been for several months in the woolen mills of the East and in Boston securing material for the There were shown samples of Australian, South exhibit. American and domestic wools, with their grease and scoured pound values stated for April 15. There were in the exhibit also samples of woolen and worsted cloths and knit goods, and samples showing the effect on finished fabrics of insoluble branding materials. This wool exhibit, it is understood, will be shown in a still more comprehensive form at the San Francisco-Panama Exposition of next year.

# "IMPORTED" FABRICS LOSING FAVOR.

ACTUAL TESTS UNDER THE NEW TARIFF RESULTING TO THE ADVANTAGE OF AMERICAN GOODS.

By WINTHROP L. MARVIN.

THERE have been increased imports of foreign woolen fabrics under the new Simmons-Underwood tariff law just as was anticipated. The figures of these increased imports are reported elsewhere in this magazine. But as a rule these heavy importations have been due to the lower price and not to any superior intrinsic quality of the foreign fabrics. The word "imported" does not carry the magic influence which was supposed to attach to it before the country entered upon this latest, and probably for a long time the last, experiment in tariff for revenue only.

The Simmons-Underwood tariff virtually cut in half the duties on foreign woolen manufactures. As the European manufacturer pays only one-half or less than one-half as much for spinning a pound of varn or weaving a yard of cloth as does the American manufacturer, a certain increase in imports based upon cheapness was the inevitable result. Many foreign fabrics could pay the 35 per cent duty and yet be laid down in our markets for a price less than a comparable American fabric could be manufactured for. enlarged purchases of European cloths and dress goods in this country have been due, most of them, to the simple fact that poverty compels skilled European spinners and weavers to do for 40 and 50 cents an amount and kind of work for which American spinners or weavers would be paid \$1 or more. That is all there is to these increased importations—the spur of necessity is greater in Europe than it is here, and the man who buys a suit of English cloth or the woman who buys and wears French dress goods is merely profiting from this circumstance.

The notion that imported woolen fabrics are habitually better than American fabrics is a notion that is keenest among persons who know least about the woolen trade. For many years under adequate protective fariffs our imports of woolens had been chiefly high-priced or novelty patterns, and there had been no actual comparison of medium-priced or low-priced American and foreign fabrics. Soon after the enactment of the Simmons-Underwood tariff, approved October 3, 1913, representatives of European houses began to show their samples in this country, though the reduced duties on woolen manufactures were not to become effective until January 1, 1914. Long before the new rates made actual importations possible, most of these European samples were frankly recognized as disappointing.

## SERIOUS FAULTS IN FOREIGN FABRICS.

Before October had ended the trade journals of New York began to remark that "Some of the foreign fabrics that are shown as being competitive do not meet the domestic lines in points of intrinsic value." A week or two later a trade authority said: "A shock of considerable proportions will occur when it is discovered that iniquities are far more numerous in manufacturing abroad than they are here. Colors here are made to stand three separate tests as to fastness in staples. The highest degree of efficiency in this respect is known here, and it is quite within the bounds of possibility that some of the prices that are being quoted here are on the basis of tests with which this market is not familiar."— ("Daily Trade Record" of New York, November 12, 1913.)

A few days later this suspicion had become a certainty. The "New York Journal of Commerce" of December 5, 1913, in its review of the woolen and worsted market stated that "With a view of getting at the bottom of the matter three of the best constructed serges made in England, which cost between 58 cents and 65 cents landed here under a 35 per cent duty, freights, commissions and other charges included, were imported in order to make comparisons. One of the leading American serges that cost 72 cents regular was used in the tests that were made, and the results obtained

were most favorable for the American product." The tests were severe ones. They are thus described:

The first test these four samples were put to was to place them in bottles containing a solution of 49 parts water and one of ammonia. The color was soon extracted from the foreign cloths, while the American withstood the test splendidly. The second test was to boil out the samples by the process known as the government soap boil. From a dark navy shade the three foreign cloths changed to a pale lilac, while the American remained unchanged. Under press cloths the three foreign serges discolored the cotton press cloth badly, while the American showed just the slightest propensity to fade. The foreign goods shrunk to such an extent that the loss in shrinkage was estimated to be equivalent to six cents a yard. These tests may be considered extreme, but as the goods used were representative of what foreign and domestic mills were offering, the tests proved the American fabrics superior in every way to those made abroad.

### LESS STRONG THAN AMERICAN CLOTHS.

This experience was most significant as proving that in fabrics of moderate price and large consumption American manufacturing methods were very much more efficient and up to date. But it was not only in the fastness of their colors that foreign cloths for popular use proved unsatisfactory. The "Daily Trade Record" of December 20, 1913, stated that "Those who have tested them are a unit as regards the result, and this is that they break on the slightest pressure." "Tensile strength is so lacking that while they are soft to handle and of satisfactory appearance, they break so easily that they would be too unserviceable to consider." A typical foreign serge broke under a test of 13 pounds while an American serge of the same weight, stock and price — that is, 77 cents a yard — did not break until 33 pounds were applied.

In the "New York Journal of Commerce" of December 22, 1913, it was declared that "Samples of a 36-inch all-worsted serge are being shown at prices equivalent to a little

over 28 cents a yard, duty paid, for blue and black, but this cloth is similar to many of the other cheap English serges. As it is very loosely constructed it contains a large amount of gum. The 30-cent serges made by the leading American mills are considered much better in every way." Thus even cheap prices due to cheap wages fail to gain the foreign fabric any preference.

An expert at New York examining a foreign blue poplin found 96 defects in one piece of 27 yards. This cloth had slipped on the warp so badly as "to make it impossible of use in women's garments." This experience recalled to a veteran garment manufacturer a trial which he had made under the Gorman-Wilson tariff of 1893–1897 when, rejecting 92½-cent American kerseys, he had bought foreign kerseys for 66 cents a yard. "The latter looked beautiful except when worked. Then the back slipped away from the front, and I had to sacrifice a good many yards at 21 cents a yard, and never took up the foreign stuff again."

There was disappointment also over imported yarns. The "New York Journal of Commerce" of March 19, 1914, stated that "Not only were these low English yarns of a quality much inferior to the grades weavers have been accustomed to using, but it is said that the percentage of moisture was considerably in excess of the amount the buyers expected to find." "It is also stated," said the "New York Journal of Commerce" of December 27, 1913, that "the quality of the stock used in many of the samples submitted is not as good as that used in the standard domestic yarns, so that the 75-cent American yarns are considered better than the British at 74."

After the reduced woolen duties had been only a few weeks in effect, the "Daily Trade Record" of New York (February 14, 1914) said that "It is reported among those who are foremost in the serge market that many of the low-priced foreign-made serges have been returned on account of 'bleeding.' This tendency was reported some time ago and excited considerable interest and comment in the trade. It

is stated, however, that this is no criterion by which to judge this grade of goods, because they were subjected to the ammonia and water test. There are reports of numbers that did not 'bleed' at testing, but which did 'bleed' after being delivered. Foreign manufacturers are recognized as being past masters in all of the arts that help them to disguise the real conditions."

### MUCH FOREIGN USE OF COTTON.

Uncertainty of color and deficiency in tensile strength were not the only grievous faults which these "imported" woolen fabrics were found to develop. Toward the end of December, 1913, a well-known authority in the woolen trade, Zadock Wolff, returning from Europe, said: "Most of the clothiers whom I saw abroad, and there were a lot of them, were disappointed in the results they obtained, virtually gave up looking after they had been there a few days, and practically eliminated the search for medium grade worsteds which was the object of their quest." "The great trouble that the clothiers encountered over there is what the Englishman calls 'scribbling' - that is, the use of cotton in an almost unrestricted way in his fabrics. Some beautiful goods are shown by the English mills, but they contain cotton and this the American buyer cannot overlook."

This general use of cotton in European fabrics was more strikingly remarked a few weeks later when suits of clothes priced at \$25, \$30 and \$35 and made of Scotch woolens were shown on Broadway — a plain twill woolen fabric with an all-cotton thread for a decoration. The "Daily Trade Record" of May 1, 1914, commenting, said that "The importance of this is that even in high-grade suits cotton slips in when the fabrics are of foreign manufacture. It has been repeatedly pointed out that abroad cotton is used regularly and as a matter of course by manufacturers, and it is one of the chief things to be wary of when purchasing foreign goods. The difference in cost between cotton and

silk would be about 5 or 7½ cents a yard, which is the difference also between goods made abroad and here." The following day the "Daily Trade Record," addressing itself to the subject, said that "Buyers of high-class merchandise have had delivered to them fabrics containing a fairly large percentage of cotton when they thought they had purchased fabrics entirely free from the staple. It is unnecessary to state that they immediately returned the goods."

The Federal government, through the investigation of the Bureau of the Census into the woolen manufacture of the United States, found that while the amount of actual wool consumed in the woolen and worsted mills of the country had increased from 330,179,000 pounds in 1899 to 474,751,-000 pounds at the end of the decade — a gain of 44 per cent, or, reckoned on a scoured wool basis, a gain of 50 per cent — in the same decade the quantity of raw cotton consumed in these woolen and worsted mills had fallen off from 40.245,000 pounds to 20.055,000 pounds, a decrease of 50 per cent, while the amount of cotton yarn purchased increased only from 35,343,000 pounds to 39,169,000 pounds, or 11 per "The net result," states this government report, "is a decided decrease in the amount of cotton used as a material by wool manufacturers." This is the fact as regards America. The use of cotton as a substitute for wool or other higher priced fibers is large and increasing in the wool manufacture of Great Britain and the Continent.

### CLOTHING MANUFACTURERS DISAPPOINTED.

The great ready-to-wear clothing manufacturers of this country who are the principal customers of American mills were quick to discover that the value of the lower tariff and easier access to European factories was very much less than they had been led to suppose by protection-hating newspapers and politicians. In March, 1914, Hart, Schaffner & Marx,

advertising in the "Saturday Evening Post" — one of the most violent exponents of tariff for revenue only — declared:

One thing we want you to be clear about: The mere fact that a fabric is imported doesn't make it any better. There are some who seem to think it does; we don't think so.

About the same time Mr. Dwight S. Hirsh, president of the Hirsh-Wickwire Company, clothing manufacturers of Chicago, returning on the "Olympic" from Europe, stated that "There is nothing exceptional about English woolens," and that his purchases of them were "about the same as in previous years." Mr. Hirsh added that American clothing manufacturers, many of them, had "met with keen disappointment at not finding suitable materials abroad. Their expectations were evidently greater than their realization."

Mr. David Kirschbaum, of A. B. Kirschbaum & Company, as quoted in the "Daily Trade Record" of March 24, 1914, said that "All of the lower and medium grades of foreign fabrics were so badly manipulated (and because of that so unreliable) that they could not be used by American manufacturers of ready-made clothes." Mr. Kirschbaum emphasized the fact that since January 1, when the reduced woolen duties went into effect, "raw materials and fabrics have advanced steadily in price." He thought that high-priced foreign fabrics such as are used by merchant tailors for suits selling at from \$60 to \$90 "would be imported in greater quantity," and that the price of the wealthy man's suit might go down from \$90 to about \$70. But he saw no advantage whatever in the purchase of the lower and medium grades of foreign cloths.

As the light weight season in woolen fabrics drew near in June, the trade journals of New York insisted that many purchasers who tried foreign woolen goods and "had ample opportunity to try them out," "are disinclined to repeat the experience." "One bought goods because he thought he had to have them while the interest in foreign goods was uppermost. He has discovered, however, that there is no

advantage in the purchase of foreign goods, and, therefore, he is not disposed to buy again."

#### IMPORTED SERGES ESPECIALLY INFERIOR.

An absence of uniformity, which is absolutely essential to the cutters in this country, was emphasized as a particular fault of these foreign woolen fabrics. American mills were able to make prompt deliveries in considerable quantities and of uniform quality and color. This in serges foreign manufacturers were apparently unable to guarantee. "In this country," says the "Daily Trade Record" of July 3, 1914, "a mill specializes on serges and is successful in putting them out in a uniform state. It is known from the start-off who is going to weave them, who is going to dye them, who is going to finish them. Not so abroad. If any considerable quantity of serges are purchased in Bradford, for instance, the first shipment may be made by one mill, the second shipment by another mill, and the third shipment by still another mill, so that in this way there is no opportunity for them to run uniform. If there is one thing in the textile business that is purchased on confidence, reputation, and experience, it is serges. This very fact militates against serges of foreign make selling freely in this country, under the circumstances, and as they are subjected to the most rigid tests there is little opportunity for them here."

This being the state of mind of purchasers on this side of the Atlantic, it is not strange to read in the London correspondence of the trade press that "A great deal of disappointment prevails in woolen circles here, owing to the fact that so few American buyers have come over this season and that those who have come have left so few orders behind them."

Thus the glamor that long hung about "imported" woolen goods is swiftly disappearing in the white light of actual experience. A while ago, as related by "Fibre and Fabric," an American woolen manufacturer saw in a tailor's window a display of his own fancy worsteds all marked "Imported."

They were held at \$9 a yard, and a suit made of them would cost \$80. The cloth was sold by the domestic mill for \$2.87 a yard. The manufacturer entered the store and had a brief interview with the proprietor, who admitted that he knew that the cloth was of American make, but the "imported" tag sold two suits to one without it. Of course, this kind of a humbug cannot long continue in these years of grace and enlightenment. The authors of the present tariff for revenue only may find that they have conferred a boon which they have not dreamed of on American woolen manufacturers by enabling some thousands of Americans who never before had an actual acquaintance with these vaunted "imported" fabrics to make a real, personal test of the qualities of foreign goods.

# PROTECTION — FREEDOM AND TYRANNY.

SOME HISTORICAL SIDELIGHTS ON THE TARIFF IN THE UNITED STATES.

By ROLAND RINGWALT.

Or necessity the tariff question is generally argued from the economic standpoint. Even when the speaker cares only for votes he must seek his votes by making a fair show for his case. "Specific," "ad valorem," "home market," "foreign trade," and kindred terms fly back and forth until one might pardonably suppose that Protection was wholly a matter of business. It hardly occurs to the average man that the Protective system was once brought forward as a means of calming mob violence, that it was then linked with Executive tyranny, and that one President brought it forward in both cases. No one can say that the facts are forgotten or concealed, yet they are so rarely joined that a brief allusion may be warranted.

The majority of astrologers and sorcerers have at least some faith in their own pretensions, and Jefferson's constant outerv against Federalist tyranny was partly sincere. certainly talked nonsense about dealing gently with insurrections "so as not to discourage them too much," and he overdid his shudders lest the Society of the Cincinnati should destroy our liberties. But Jefferson was sometimes in earnest, and he firmly believed — indeed he knew — that excise taxation might render government odious and bring on rebellion. He had seen the fearful evils of the old French imposts, he was aware that the English laws were harsh and vexatious, even under our milder system he had noted the resistance to the Whiskey Tax. Abstractly he leaned toward Free Trade, practically he felt that it was impossible. In raising revenue he preferred a tariff which at worst directly annoys only a few merchants and travelers to an internal system, which meddles with everybody. Under a mild excise system, Jupiter nods, and the law is semi-ridiculous. Under a vigorous enforcement the rigor and the vigilance give offence to many. Jefferson, who carefully felt the public pulse, considered that the tariff system was better than the excise.

Jefferson, in his second inaugural address, congratulated the country on the repeal of the internal taxes. His worst enemies can hardly say that he exaggerated in this sentence: "These (the excise duties), covering our land with officers, and opening our doors to their intrusions, had already begun that process of domiciliary vexation, which, once entered, is scarcely to be restrained from reaching successively every article of produce and property." He was within bounds. The "moonshine" districts are so far from the great cities, so little known to the average tourist, illiteracy is so common there, that the long ugly story of the desperado and the spy, the petty tyrant in the poor man's cabin and the lawless mountaineer who will make fruit brandy if he kills somebody for it is not often told. We had a glimpse of something like it recently in the Allen gang. Under the excise system officers have entered houses at dead of night, dwellings have been burned, shots have been fired from behind trees, agents of the government have been stabbed in the back, quiet farmers have been driven away by threats, timid men have perjured themselves to clear guilty men, anonymous letters threatening instant death, the bullet that went astray and killed the baby, the swaggering despot who in pretending to search for whiskey purposely maimed a poor man's horse, the vindictive scoundrel who shot Somebody because Somebody's brother was in the Internal Revenue department - all this is part of our history, and it is not wholly a thing of the past. Of course, we hear loud complaints of the despotism of the tariff—the United States Senate rang with the plea that some rich women had been compelled to pay an extortionate duty on their poodles. Even since Wilson's election a young man has been ordered to pay 20 per cent on some fine bulldogs. Several persons have been delayed by baggage inspectors until they were late for the matinees. But all the

annoyances at all the Custom Houses since the Tariff Act of 1789 have been slight compared with the grim stories of the "moonshine" regions—the land of arson and assassination.

A detailed review of excise taxation, French, English, Irish, and our own, would not put Jefferson's views out of court. But, after all Jefferson's outcry against Hamilton, the inaugural goes on to say: "The remaining revenue on the consumption of foreign articles is paid cheerfully by those who can afford to add foreign luxuries to domestic comforts. Being collected on our seaboard and frontiers only, and incorporated with the transactions of our mercantile citizens, it may be the pleasure and the pride of an American to ask. what farmer, what mechanic, what laborer, ever sees a taxgatherer of the United States? These contributions enable us to support the current expenses of the government, to fulfil contracts with foreign nations, to extinguish the native right of soil within our limits, to extend these limits, and to apply such a surplus to our public debts, as places at a short day their final redemption, and that redemption once effected, the revenue thereby liberated may, by a just repartition among the States, and a corresponding amendment of the Constitution, be applied in time of peace to rivers, canals, roads, arts, manufactures, education, and other great objects within each State." Is not this a fairly wide construction of the "general welfare" clause?

If the democratic, the popular argument for a Protective system has not been pressed by Republicans as it should have been there is little need to expand it. The case was ably put by Jefferson, and Jefferson's strength among wage earners shows that he knew their wishes. He wanted their votes and he got them. Even to-day his name is almost invariably cheered. Now comes the swing of the pendulum — the extraordinary fact that Jefferson carried Protection to the extreme point of destroying long established industries, bankrupting old commercial houses, instituting domiciliary searches, summoning the army and navy to his aid, threatening State authorities, and risking a dissolution of the Union. To this day school teachers talk of the harsh act of Parliament which

closed the port of Boston, and half forget that Jefferson had a Boston Port Bill for every harbor on the coast.

Toward England Jefferson felt the bitter hatred which only civilians know—that desperate rancor which soldiers cannot understand. He hated her because of his personal grievances, because she was a land of primogeniture, because she had dukes and earls, because she had a religious establishment, because she impressed our seamen, because she was anti-French, because of her best and worst traits, because she was English. The mere fact that a dinner was in French style made Jefferson like it better. He loved European fashions, and gave his house an Italian name, "Monticello" (little mountain). As a publicist, a lawyer, a man of leisure and a student, he was anti-English.

Acts of Congress raising tariff duties were signed by Jefferson, but his desire to strike at England was not satisfied with half-way measures. He asked Congress to absolutely prohibit certain British manufactures, and the sweeping vote showed that he could rely on loyal obedience. Then he called for an Embargo, without any limit as to time, a measure prohibiting our ships from sailing to foreign ports, refusing cargoes to foreign vessels, and compelling coasters to give bond that their cargoes should be landed only at domestic ports. The great authority on strict construction declared that the power to regulate commerce meant to suppress it altogether, the enemy of harsh government let it be known that he would veto any bill repealing the Embargo, the man who had denounced King George the Third "for cutting off our trade with all the world "actually did that very thing. Shipowners went bankrupt and cut their throats, hungry sailors marched along the streets cursing the government, lawyers and clients planned innumerable evasions, shipvards were silent and wharves sprouted with grass — no Federalist. can paint the scene in darker colors than were used by New England's noblest Democrat, Robert Rantoul. drove this prostrating Embargo through the United States Senate in four hours, and in a few days put it through the House. Fitz John Porter's restoration to the army took up

several hundred times as much of legislative attention. Then came the enforcement act, which proved that Jefferson was prepared to confiscate ships, to search private houses, to seize the books of merchants, to make his little finger heavier than the loins of John Adams. Under the pressure of commercial extinction and the call of instant necessity the clever New England sailor and even the field hand of Virginia turned to crude manufactures. Some homely articles must be had, and as foreign supplies were cut off native goods had to be made. The Embargo was repealed, but in its place came an act forbidding all trade with England and France, then came the War of 1812, and home industry took several further steps.

It is matter of history that Jefferson's flatterers asked him to visit New England, and that he replied with a clever letter to the effect that no President but Washington should make stately pilgrimages. Beyond question Jefferson was afraid that some insane bankrupt would shoot or poison him. Yet the Embargo that ruined the merchant and the planter forced the shipwright and the rope maker to seek other callings. As Beaconsfield says "The desert made the camel," and the American learned in the hard school of experience what all the arguments of Hamilton had not taught him. The War of the Revolution had suspended commerce for years, the French and English decrees had greatly restricted it, the Embargo had stopped it entirely, the War of 1812 had cut it off for more than two years, the press gangs of Britain and the pirates of Barbary had been factors in foreign trade, and the lesson of all this was that we must have domestic workshops to supply our needs.

More than Hamilton in his splendid report, more than Carey in all his books, more than Morrill and Kelley and McKinley and Dingley, more than any other ten men Thomas Jefferson was the great worker for American manufactures. What makes the case doubly surprising is that Protection for Protection's sake was never his first object. At the beginning of his Administration his desire for domestic peace led him to oppose the internal revenue taxes which inflamed the passions of the farmer and had already called

forth lawless bands. Before he left office he fancied that he could force England to cease from impressment provided he cut off her supplies of American grain, and to do this he crushed the commerce of New England and hazarded secession. "Incidental Protection" was once the favorite phrase of Randall Democrats. Verily it was "incidental" to Jefferson, "incidental" to his dread of excise tyranny, and then "incidental" to his own tyranny when he dealt out to New England in time of peace a measure so oppressive that the kindly Lincoln winced at dealing out a like measure to insurgents in time of war.

### ACTIVE AND IDLE MACHINERY.

COMPARATIVE RETURNS FROM THE WOOLEN MILLS FOR THE LAST THREE QUARTERS.

REPLIES to the Association's inquiry sent to all the woolen mills of the United States, asking for a statement of active and idle woolen machinery on June 1, 1914, show that no marked change in the condition of the industry had developed up to that date from the condition disclosed by the previous inquiry of March 2, 1914—though the showing, of course, was somewhat better than that of December 1, 1913, near the end of a long year of tariff uncertainty.

Depression in the carpet manufacture continues to be marked, no fewer than 28.3 per cent of the carpet looms of the country having been reported as idle on June 1, 1914. This is a larger proportion of inactivity than is noted in the woolen and worsted mills, where 24.6 of the broad and 25 per cent of the narrow looms were idle. The state of the industry as a whole is still far from satisfactory, for though here and there fortunate mills are in full operation, the great majority of the concerns reporting were suffering on June 1 from more or less unemployment.

Again returns have been received with gratifying promptness from mills representing a major part of all the woolen machinery of the United States. Manufacturers were asked on June 1 whether they desired an inquiry and report of active and idle machinery more frequently than once in three months, and the majority of them indicated that they were satisfied with the present arrangement. Another inquiry will be made on and for September 1 — no signatures to the separate returns being required. With the present statement there is published the corresponding statement in percentages of idle machinery on December 1, 1913, and March 2, 1914. Another quarterly return will complete a full year, and it is confidently believed that these reports will thus prove of

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increasing value to the industry. The results of the latest inquiry are as follows:

Machinery.	Total Num-	In Operation.	Idle.	Per Cent of Idle to Total Reported.		
MACHINENT.	ber Reported.	June 1, 1914.		June 1, 1914.	Mar. 2, 1914.	Dec. 1, 1913.
Looms, wider than						
50 in. reed space, Looms, 50 in. reed	37,596	28,352	9,244	24.6	24.8	24.9
space, or less	10,890	8,163	2,727	25.	17.7	27.2
Looms, carpet . Woolen cards,	2,876	2,062	814	28.3	24.5	32.1
sets	3,229	2,605	624	19.4	19.5	21.4
Worsted combs . Woolen spinning	1,743	1,473	270	15.5	13.	23.1
spindles Worsted spinning	985,641	731,004	254,637	25.8	22.2	22.7
spindles	1,571,177	1,287,240	283,937	18.1	22.	26.

## PRICES OF YARNS AND CLOTHS.

A COMPARATIVE STATEMENT OF CHANGING VALUES OF CERTAIN REPRESENTATIVE MANUFACTURES.

Another statement of comparative prices of yarns and cloths, after a plan initiated some months ago, is published below—the prices of yarns running back to 1905. These comparisons of prices, to be presented from time to time in the Bulletin, have been received with interest, and it has been possible to extend in this new statement the scope of cloth prices, always difficult of tabulation. From time to time as fashion demands even staple fabrics are sometimes discontinued, but the following figures are given in the belief that a comprehensive line of staple goods will in its entirety fairly represent the course of prices from year to year.

PRICES FOR WOOLEN AND WORSTED CLOTHS.

Discounts deducted to reduce as nearly as practicable to a uniform net basis for 30-day terms.

The fabrics included in this list are all of good quality and pure wool.

Prices are per lineal yard, except for blankets.

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No.	Trade Name.	Quality.	Weight per Lineal Yard.	Width.	Prices First 6 Months, 1913.	Prices Last 6 Months, 1913.	Prices First 6 Months, 1914.
1.	Clay diagonal.	½ blood.	12 oz.	5611	\$1.24	\$1.10	\$1.06
2.	Clay diagonal,	blood.	14 oz.	56"	1.35	1.19	1.13
3.	Clay diagonal.	🖟 blood.	16 oz.	56"	1.46	1.28	1.24
4.	Serge.	½ blood.	11 oz.	56"	1.07	.95	1.08
5.	Serge.	🖁 blood.	14 oz.	56"	1.00	.90	1.00
6.	Flanuel, blue.		14 oz.		1.17	1.17	1.17
7.	Flannel, white.			36"	.70	.70	.70
8.	Thibet.		12 oz.	56"	.88	.79	.79
9.	Venetian.		14 oz.	56"	1.20	1.13	1.08
10.	Kersey.		30 oz.	54"	2.20	2.25	Discontinued
11.	Kersey.		26 oz.	54"	2.13	2.13	<b>.</b>
12.	Covert.		16 oz.	56"	2.48	2.48	2.30
13.	Kersey.		28 oz.	54	2.50	2.25	2.38
14.	Kersey.		24 oz.	54"	2.25	2.00	2.13
15.	Broadcloth.			54"	1.75	1.75	
16. 17.	Worsted coating. Worsted coating,		16 oz. 12 oz.	54/56	1.68 1.55	1.50	1.43 1.28
	Government goods:		12 oz.	54/56"	1.00	1.40	1.20
	(Army):	İ					
21.	Olive drab flannel.	k blood.	81 oz.	54/56"	Feb., .99	July, .87	<b></b> .
22.	Melton.	a blood.	$13\frac{1}{5}$ oz.	56/58"	May, .93		
23.	Melton.	a blood.	16 oz,	56/58"		July, 1.28	
24.	Melton.	3 blood.	30° oz.	56/58"			
	(Marine Corps):	0		,			
30.	Shirting flannel	1 blood.	81 oz.	54//	Jan., 1,075		.912
	(khaki).	_	-				
31.	Flannel, winter-	½ blood.	13/14 ozs.	54//	Jan., 1.18	Aug., 1.13	
	field.						
32.	Jacket cloth, dark	1/2 and 3/4	14 oz.	54"	Jan., 1.45		
	blue.	blood.					
33.	Coat cloth, dark	and full	20 oz.				
	blue.	blood.					
34.	Kersey, winter-	½ blood.	14/15 ozs.	54"			
0.5	field.						
35.	Kersey, winter-	½ blood.	22 oz.	54"	Jan., 1.74	Aug., 1.49	
40.	field.	3 3 3	40 /51	#1 . F1 C11			2.04
<b>4</b> ∪.	Blanket, winter-	3 blood.	46/51 ozs.	1, X 9, 9,		Aug., 2.94	2.84
1	field.		each.			each.	each.

PRICES FOR CERTAIN STANDARD WORSTED YARNS.

Below are Boston market quotations on certain standard worsted yarns from January 1, 1905, to July 1, 1914:

			2/40—X.	2/50—XX
an. 1, 1905	\$0.79	\$0.90	\$1.04	\$1.24
April 1, 1905	.77	.86	1.04	1.24
uly 1, 1905	.81	.90	1.09	1.31
Oct. 1, 1905		.94	1.18	1.38
an. 1, 1906		.97	1.20	1.37
April 1, 1906		.97	1.20	1.37
uly 1, 1906		.97	1.20	1.37
Oct. 1, 1906		.97	1.20	1.34
an. 1, 1907		.96	1.18	1.34
April 1, 1907		.99	1.20	1.35
uly 1, 1907		.99	1.20	1.35
Oct. 1, 1907		.95	1.18	1.33
an. 1, 1908		.95	1.18	1.33
April 1, 1908		.84	1.08	1.28
uly 1, 1908		.82	1.00	1.24
Oct. 1, 1908		.82	1.00	1.24
an. 1, 1909		.90	1.15	1.37
April 1, 1909		.96	1.18	1.38
uly 1, 1909	.82	.96	1.22	1.40
Oct. 1, 1909		1.06	1.32	1.50
an. 1, 1910		1.08	1.32	1.50
April 1, 1910		1.02	1.25	1 40
uly 1, 1910		.95	1.10	1.30
Oct. 1, 1910		.93	1.05	1.30
fan. 1, 1911	.80	.92	1.073	1.30
April 1, 1911		.86	1.05	1.22
fuly 1, 1911		.86	1.00	1.18
Oct. 1, 1911		.86	1.00	1.18
Jan. 1, 1912	.74	.86	1.00	1.17
April 1, 1912		.90	1.05	1.22
July 1, 1912	.78	.90	1.08	1.25
Oct. 1, 1912	.84	.98	1.15	1.32
Jan. 1, 1913		.98	1.15	1.32
April 1, 1913	.81	.93	1.10	1.25
July 1, 1913	.73	.82	1.00	1.18
Oct. 1, 1913		.82	1.00	1.18
Jan. 1, 1914		.70	.90	1.05
April 1, 1914	.64	.72	.97	1.11
July 1, 1914	.65	.73	1.00	1.13

Note.

<sup>3 = 1/4</sup> Blood Stock. 4 = 3/8 " " X = 1/2 " " XX = Fine Medium Stock.

# Obituary.

### THOMAS DOLAN.

Mr. Thomas Dolan, of Philadelphia, long one of the foremost woolen manufacturers of the United States and an executive and financier of the first rank, died at his home in Torresdale, Pa., Friday, June 12, 1914, at the age of seventy-nine. Mr. Dolan was a native Pennsylvanian, born in Montgomery County, October 27, 1834. He was educated in the public schools, and as a youth entered the retail dry goods business in Philadelphia. Later, in 1856, he entered the employ of a commission house handling hosiery and knit goods. He won success in this field, and when, early in the Civil War, his employers failed, he went into business for himself, embarking on the manufacture of knit goods under the name of the Keystone Knitting Mills at Oxford and Hancock Streets, Philadelphia.

Mr. Dolan was characteristically quick to discern the changing trend of fashions. In 1872 he began the manufacture of worsted suitings, his firm being known as Thomas Dolan & Company. He added to his business the manufacture of fancy cassimeres and ladies' cloakings, and in 1882 ceased the manufacture of knit goods. Mr. Dolan also engaged in the spinning of worsted yarns, first at Darby and later in Philadelphia. His business success was great; his enterprise, ability and perseverance were abundantly rewarded, and it is said of him that he never had any serious difficulties with any of his employees. In 1897 he retired from the manufacturing business with a capital that enabled him to give his attention to the development of important public utilities.

Mr. Dolan was a pioneer in the electric light field, and he won a national reputation for his leadership in the development of the United Gas Improvement Company, the Philadelphia Traction Company, and the Philadelphia Rapid Transit Company—this last concern bringing all of the street car lines of Philadelphia under one control. Mr. Dolan's activities extended to other cities, and he was influential in the traction business of New York, Chicago, and Baltimore. He was associated with Messrs. Widener, Elkins, and others.

Mr. Dolan was for many years an active member of the National Association of Wool Manufacturers, and for some years a mem-

ber of its Executive Committee. On his retirement from the management of his woolen mills Mr. Dolan was elected an honorary member of the Association, a distinction conferred only upon Hon. Justin S. Morrill and Theodore C. Search.

Throughout his business life Mr. Dolan was always a strong Republican and protectionist, actively interesting himself in the affairs of the protectionist party and holding a place of influence with the National Administration which had upheld the protective principle. He was the first president of the Manufacturers Club of Philadelphia, and at one time was president of the National Association of Manufacturers. He was a founder of the Union League of Philadelphia, and for many years one of its vice-presidents. He was interested also in the Fidelity Trust Company, the Finance Company of Pennsylvania, and the Philadelphia Electric Company. He served as a trustee of the Pennsylvania Museum and School of Industrial Arts. Conspicuous for his public spirit, sagacity, and courage, Mr. Dolan was for many years one of the most potent forces in the business and political life of Philadelphia and Pennsylvania. He will be keenly missed, and his memory will be held in honor. He is survived by a widow and three sons.

### JAMES MOORE SWANK.

Mr. James Moore Swank, for many years the secretary of the American Iron and Steel Association and one of the most eminent statistical authorities of the United States, died in Philadelphia June 21, 1914, in his eighty-fourth year. Mr. Swank had been in failing health for some time, and on December 31, 1912, he relinquished the official post which he had held for forty years. After his resignation the American Iron and Steel Association, organized in 1855, gave place to the American Iron and Steel Institute, incorporated a few years ago under the laws of New York, of which Judge Gary, chairman of the board of directors of the United States Steel Corporation, is the president.

An appreciative account of the life and work of Mr. Swank, prepared by John Bruce McPherson, was published, with a photograph of Mr. Swank, in the Bulletin of September, 1913. This would render superfluous any detailed sketch at this time of the career of one of the notable protectionist thinkers of America. Mr. Swank had passed nearly his entire life in his native Penn-

sylvania. From 1852 to 1869 he was a working editor in Johnstown. Then he went to Washington to serve as the clerk of the House Committee on Manufactures. After two years Mr. Swank became the chief clerk of the Department of Agriculture. On January 1, 1873, he became the secretary of the American Iron and Steel Association. The art of the statistician was then in its infancy, and it was Mr. Swank who laid the foundations of the system of exact records of production, etc., which has been brought to such elaborateness in the iron and steel trade of the United States.

But Mr. Swank was more than a statistician. He was a strong writer and a convincing speaker in defence of the American system of protection. He was one of the men who met and defeated the determined effort of the Cobden Club of England to arouse the agricultural West against the manufacturing East, and to destroy the protectionist policy of Lincoln, which, after the Civil War, began to make America the foremost manufacturing nation in the world. Mr. Andrew Carnegie once said of him that "Iron and steel owe an unpayable debt to Mr. Swank," and Senator Morrill, of Vermont, said that "I and my colleagues relied more upon the statistics and opinions of Mr. Swank concerning iron and steel than upon those of any other man or of most others combined." Judge Gary has said, "As a statistician and as a representative of the industry, he had no equal." Mr. Swank has died rich in years and honors, leaving an extraordinary record of original thought and achievement.

In a letter received at the office of the National Association of Wool Manufacturers a few weeks before his death, Mr. Swank said: "The trend of public sentiment in our country on the tariff question to-day is strongly toward the restoration of the protective policy as soon as the opportunity offers. Our iron and steel industries are just as much stirred up on this issue as are your New England textile manufacturers. Unfortunately, however favorable the constitution of the new House may be after next fall's elections, President Wilson would not stultify himself by approving a new tariff bill. I look for the overwhelming defeat of his party this year."

# WILLIAM W. JUSTICE.

Mr. William W. Justice, long a prominent wool merchant of Philadelphia, died on May 24, 1914, at the age of seventy-seven years. Throughout his life he had been identified with the wool

business of Philadelphia, first in the employ of Hanson, Robinson & Company, and later as a member of the well-known firm of Justice, Bateman & Company, in which he was associated with his brothers Theodore and Henry. Mr. William Justice was the senior member of this firm until 1904, when he retired. He was one of the oldest members of the Union League Club of Philadelphia, which he had joined in 1865, and he was also active in the affairs of the Manufacturers' Club of Philadelphia. He was one of the directors of the Centennial Exposition of 1876.

Mr. Justice was for many years a director of the Pennsylvania Company for Insurances on Lives and Granting Annuities and of the Pennsylvania Trust Company and the Philadelphia Belt Line Railroad. Throughout his life he took a vigorous part in the municipal affairs of Philadelphia, and was honored for his ability and sagacity as a merchant and a citizen. He leaves a widow and a daughter.

### ROBERT DORNAN.

Mr. Robert Dornan, of Philadelphia, one of the leading men in the carpet manufacture of the United States, died on May 22, 1914, at the age of seventy, after a long illness. Mr. Dornan, a native of Ireland, had lived in Philadelphia since childhood, and had been educated in the public schools. He entered on a business life in 1859 as a clerk in a dry goods store, and later became a cloth salesman. His connection with the carpet manufacture began in 1866, when he entered into partnership in this industry with his brother John. For twenty-one years they conducted the business together, and then John withdrew and Robert Dornan was joined by a younger brother, T. Benton Dornan, in the firm of Dornan Brothers, of which Robert was president.

Mr. Dornan was not only a successful business man, but an active, public-spirited citizen. He had been president of the Kensington National Bank, a director of the United Security Life Insurance & Trust Company, the Security Trust Company, of Washington, D.C., and the Philadelphia National Fire Insurance Company. He was also a trustee of the Penn Mutual Life Insurance Company, and was treasurer of the Manufacturers' Club at its organization in 1887. Later, in 1894, Mr. Dornan succeeded Mr. Thomas Dolan as president of the club. He was a member also of the Union League and the Columbia Clubs of Philadelphia, and a member of the Temple Presbyterian Church. Mr. Dornan leaves a widow and a daughter.

### CHARLES W. GLEASON.

MR. CHARLES WHITNEY GLEASON, of the firm of A. D. Gleason, Gleasondale, Mass., died Sunday, July 5, 1914, at the age of seventy-three. He was a native of North Andover, and had passed his entire life in the manufacturing business, entering as a lad the employ of his father. He became superintendent of the plant in 1863, and held this post of active responsibilities twenty-four years, even after he had become a member of the firm. He also purchased for many years all the wool consumed in the business, of manufacturing woolen dress goods. Mr. Gleason in 1884 succeeded his father as the head of the concern, and was highly regarded as a capable and honorable manufacturer.

### OSCAR F. CHASE.

MR. OSCAR F. CHASE, one of the oldest wool manufacturers in New England, died at his home in Webster, Mass., on May 26, 1914, in his eighty-third year. He was a native of Woonsocket, R.I., and was educated in Northampton, Mass. He and his father, John Chase, many years ago established the Chase Mills, now the property of the American Woolen Company. Mr. Chase was interested also in woolen mills in West Thompson, Conn., Wilsonville, Conn., and North Oxford, Mass. He leaves a widow and two daughters.

### LEWIS WILLEY.

Mr. Lewis Willey, manager of the Philadelphia office of Francis Willey & Company, wool importers and top makers of Bradford, England, died on Friday, June 26, 1914, at Philadelphia, at the age of fifty years. Mr. Willey was a native of England, a nephew of Mr. Francis Willey, and in his youth was associated with this well-known firm abroad. But in 1894 he came to the United States and connected himself with the Philadelphia office of the house. Three years later he became the manager of the Philadelphia office, and conducted its business until the present year. He had been ill for about three months. Mr. Willey was an active business man, with a thorough knowledge of the industry.

# Editorial and Endustrial Miscellany.

# IMPORTS UNDER THE NEW TARIFF.

THE REDUCED RATES TRANSFERRING A PART OF THE AMERICAN MARKET TO EUROPE.

IMPORTS of wool manufactures keep on increasing in a way to demonstrate anew that the Simmons-Underwood tariff, as its Southern sponsors have frankly said, is a tariff not for revenue and protection but for revenue only. Its effect upon great Northern manufacturing industries is one that would rejoice the shades of John C. Calhoun and other ante-bellum exponents of the idea that protection is wholly iniquitous and unconstitutional. Official figures show that American purchases of foreign woolen goods, varns, tops, etc., were valued at no less than \$19.116.751 in the first five months of the new reduced rates the months from January to May inclusive — as compared with \$5.984.654 for the corresponding five months of the previous year. It is manifest that the Simmons-Underwood law is proving the anticipated "good thing" to European manufacturers who are its direct and chief beneficiaries. These figures indicate a total importation of wool manufactures of not far from \$45,000,000 for the calendar year 1914, as compared with \$17,351,423 for the calendar year preceding.

Conditions are such that practically all of these increased importations represent a displacement of the products of American labor and capital. There has been no enlargement in the domestic consumption of woolen goods because of any reduction in prices, for such a reduction, generally speaking, as these pages have repeatedly shown, is inappreciable when it has reached the "ultimate consumer." Indeed, because of the widespread and serious business depression accompanying the new revenue-only experiment, there can be no question that the actual purchase and use of woolen fabrics by the American people have very greatly fallen off, with the increase of unemployment and the inevitable decrease of ability and inclination to buy.

To estimate with fairness the value of American woolen goods displaced by the importations, it is necessary to add to the value of the goods imported the amount of the duty, which for all classes of goods, yarns, tops, etc., is presumably not far from 25

per cent. The actual value of American products displaced by the importations is, therefore, not far from \$25,000,000 for the five months of January to May inclusive, and for an entire year at the same ratio the amount will be not far from \$60,000,000.

This is a very serious burden upon the American industry in a period of general business depression and curtailment. It represents a substantial percentage of the total production of the industry, which in the highly prosperous year 1909 was set by the Bureau of the Census at \$507,000,000. That was an exceptional twelvemonth. The next year, even under the Aldrich-Payne protective tariff, would certainly have shown a smaller figure, and considering all the circumstances of the present year it is highly probable that the total value of the output of American woolen mills, including carpets, will not very much exceed \$400,000,000 — so that the duty paid importations under the first year of the new tariff will equal 15 per cent of the total American production, instead of only 6 per cent as in 1909.

"Ah," but the proponents of tariff for revenue only will say, "this means increased competition." Undoubtedly it does mean increased competition, but an excessive and unwholesome competition, unfair to American capital and degrading to American labor. It is the kind of competition that sets up the English or German or French worker who gets 80 cents or \$1 a day against the American worker who gets \$2—laboring at the same trade with the same kind of machinery operating in each country at equal maximum speed. The final and inevitable result is not to move up the English or German or French wage—but to force down the American wage. That is exactly what happened when the revenue-only experiment was last tried in 1894–1897, and that is what will happen now if the experiment is not again quickly ended by the imperative voice of the American people.

There was competition — quick, keen, often merciless competition — in the manufacture of woolen goods under the previous protective tariff, before the present inadequate law was established. There was the competition of a thousand separate American mills, under at least 900 separate rival managements, equipped with enough machinery to make all of the wool manufactures required by the American people, and fighting constantly for a chance to live and earn a dividend which for the whole industry probably did not average 6 per cent. But though this was sharp, it was fair and equal competition, for the reason that

all the mills were built and equipped on substantially even terms and were bidders in the same market for their materials, supplies and labor. Their wages were nearly the same, and if one mill had an advantage over the other it was apt to be due to some superiority in organization or in the alertness or sagacity of its management.

In other words, American competition was fair and honest competition on virtually even terms, while the new and excessive European competition that has been invoked by the new tariff for revenue only is a competition based upon the fact that the pressure of population and poverty on the other side of the Atlantic is such that skilled men and women are forced to accept for spinning a pound of varn or weaving a yard of cloth a wage. as the Tariff Board has testified, one-half or less than one-half of what is paid for a like kind and amount of work to American workers. This is the main reason why European woolen goods can be sold at a profit for from five to twenty or more cents less a yard than similar American goods — a difference in price large enough to take business away from American mills and give it to European mills, but not large enough, apparently, to make any appreciable difference in the price of a finished garment to the man or woman who buys and wears it.

The net result, therefore, of these increased importations of woolen goods is that labor in this country is displaced and deprived of employment—as demonstrated by the fact that at our quarterly inquiry June 1 about 25 per cent of the woolen looms of this country were idle—new business and new profits are bestowed upon foreign manufacturers, and the people of this nation, wearing more of foreign and correspondingly less of American fabrics, are paying for their clothing about as much as they did before. If the American people like this kind of thing, they will have a chance to say so in the November Congressional elections, and if they do not like it they will have a chance to voice their emphatic dissent from legislation inspired out of the economic dark ages of the world and framed by a minority Administration.

The tabular record of the imports of wool and manufactures of wool for each of the three months, March, April, and May, 1914, compared with the corresponding months of 1913 follows—the imports for the months of January and February having been recorded in the April Bulletin.

IMPORTS UNDER THE NEW TARIFF, MARCH, APRIL AND MAY, 1914, WITH CORRESPONDING MONTHS OF 1913 FOR COMPARISON.\*

	March.					
Articles.	19	13.	1914.			
	Quantity.	Value.	Quantity.	Value.		
Wool, hair of the camel, goat, alpaca, and other like animals, and manu- factures of: Unmanufactured —						
Class 1 — Clothinglbsdut	11,501,450	\$2,681,544				
Class 2 — Combing lbsdut	1,487,584	383,638				
Class 3 — Carpetlbsdut	9,074,796	1,197,512				
Total	22,063,830	4,262,694				
Wool of the sheep, hair of the camel and other like animals — Class 1 — Clothing 1lbsfree Class 2 — Combing 1lbsfree Class 3 — Carpet 1lbsfree			21,872,566 2,506,018 12,063,190	\$5,253,229 616,845 2,066,013		
Totallbs			36,441,774	\$7,936,087		
Hair of the Angora goat, alpaca, and other like animals 2lbsdut			154,838	65,950		
Total unmanufacturedlbs	22,063,830	\$4,262,694	36,596,612	\$8,002,037		
Manufactures of — Carpets and carpeting,	78,572 283,691	\$311,837 328,974	85,565 1,314,242	\$379,950 1,396,910		
dren's sq. ydsdut	1,043,009	225,973	763,761	740,928		
Press cloths of camel's hair for oil milling purposes 3		165,687	1,315,731	14,936 170,480 194.303		
All other	• • • • • • • • • • • • • • • • • • • •	95,617		757,608 229,681		
Total manufactures of						

<sup>\*</sup> The imports for January and February were published in the April Bulletin.

<sup>1</sup> Wool free Dec. 1, 1913.

<sup>&</sup>lt;sup>2</sup> Entered as wool of Class II. previous to Dec. 1, 1913.

<sup>&</sup>lt;sup>3</sup> Free after Dec. 1, 1913.

<sup>4</sup> Classified as manufactures of wool before Jan. 1, 1914.

# IMPORTS UNDER THE NEW TARIFF. — Continued.

	APRIL.				
ARTICLES.	19	13.	1914,		
	Quantity.	Value.	Quantity.	Value.	
Wool, hair of the camel, goat, alpaca, and other like animals, and manufactures of: Unmanufactured — Class 1 — Clothing	7,072,086	\$1,658,168			
Class 2 — Combinglbsdut	820,625	215,504			
Class 3 — Carpetlbsdut	7,352,890	969,440		• • • • • • • • • • • • • • • • • • • •	
Class 5 — Car per		303,440			
Totallbs	15,245,601	\$2,843,112			
Wool of the sheep, hair of the camel and other like animals —  Class 1 — Clothing 1 lbs free Class 2 — Combing 1 lbs free Class 3 — Carpet 1 lbs free			26,925,230 1,673,988 10,382,074	\$6,581,569 445,869 1,799,657	
Totallbs			38 981,292	\$8,827,095	
Hair of the Angora goat, alpaca, and other like animals 2 lbsdut			43,311	12,905	
Total unmanufacturedlbs	15,245,601	\$2,843,112	39,024,603	\$8,840,000	
Manufactures of — Carpets and carpeting,	76,885 232,692	\$302,758 257,583	111,540 1,407,260	\$451,953 1,282,786	
dren's	1,116,035	226,871	333,668	321,661	
Press cloths of camel's hair for oil milling purposes 3 free. Wearing apparel dut. Wool wastes 3 lbs. free. All other dut. Hair of the Angora goat, alpaca, etc., manufactures of 4 dut.		90,684	935,468	806 124,996 132,171 791,941 227,213	
Total manufactures of		\$991,382	[	\$3,333,527	

<sup>&</sup>lt;sup>1</sup> Wool free Dec. 1, 1913.

<sup>&</sup>lt;sup>2</sup> Entered as wool of Class II. previous to Dec. 1, 1913.

 $<sup>^3</sup>$  Free after Dec. 1, 1913.

<sup>4</sup> Classified as manufactures of wool before Jan. 1, 1914.

### IMPORTS UNDER THE NEW TARIFF. - Concluded.

	MAY.					
ARTICLES.	19	13.	1914.			
	Quantity.	Value.	Quantity.	Value.		
Wool, hair of the camel, goat, alpaca, and other like animals, and manufactures of:						
Class 1 - Clothinglbsdut	4,109,866	\$1,009,767				
Class 2 - Combinglbsdut	601,935	159,553				
Class 3 — Carpetlbsdut	4,985,025	651,967				
Totallbs	9,696,826	\$1,821,287				
Wool of the sheep, hair of the camel and other like animals —						
Class $1 - Clothing 1 \dots lbs \dots free \dots$			16,580,562	\$4,353,487		
Class 2 — Combing 1 lbs free			2,137,436	578,275		
Class 3 — Carpet 1lbsfree			11,378,152	1,857,502		
Total			30,096,150	\$6,789,264		
Hair of the Angora goat, alpaca, and other like animals 2lbsdut			478,200	171,025		
Total unmanufacturedlbs	9,696,826	\$1,821,287	30,574,350	\$6,960,289		
Manufactures of — Carpets and carpeting,						
sq. ydsdut	92,201	\$426,164	78,680	\$339,825		
Clothslbsdut	232,283	228,871	1,467,335	1,316,156		
Dress goods, women's and chil-						
dren's	860,083	186,804	110.071	000 010		
dren'sdut			449,274	379,716		
Press cloths of camel's hair for oil milling purposes 3free				178		
Wearing appareldut		105.049		130,282		
Wool wastes 3lbsfree		100,040	662.164	89,663		
All otherdut		98,127	002,104	923,396		
Hair of the Angora gost, alpaca, etc.,		1 00,121				
manufactures of 4dut				255,421		
Total manufactures of		\$1,045,014		\$3,434,637		

<sup>1</sup> Wool free Dec. 1, 1913.

### AN ILL-TIMED EFFORT.

THE BUSINESS OF THE COUNTRY OVERWHELMINGLY OPPOSED TO FURTHER HARASSMENTS OF INDUSTRY.

PRESIDENT WILSON'S program for further legislation regulating the country's business has been received with pronounced disfavor by American business men. The opinion, North, South, East and West, of the most sagacious and conservative elements

<sup>&</sup>lt;sup>2</sup> Entered as wool of Class II. previous to Dec. 1, 1913.

<sup>3</sup> Free after Dec. 1, 1913.

<sup>4</sup> Classified as manufactures of wool before Jan. 1, 1914.

of the nation seems to be that there has already been altogether too much rocking of the boat during the present Congress and the life of the present National Administration. And from every town and city there has been going up a fervent prayer to be let alone — a prayer for a period of peace and quiet.

In spite of these overwhelming protests from men who are best equipped to judge of the wisdom or lack of wisdom of national policies relative to business, President Wilson has proclaimed that he proposes to hold the lawmakers in session until his program of corporation reform shall have been enacted. There has been no partisanship in the remonstrances of business men. Democrats as well as Republicans have declared themselves pronounceably against corporation bills of the National Administration. A new tariff law and a new currency law are almost universally believed by manufacturers, merchants, bankers and others to be all that the country can endure for the present.

In insisting on further ill-digested and radical legislation President Wilson is setting himself against the substantial business interests of the United States as no American President has done for three-quarters of a century.

Association of Wool Manufacturers, foreseeing the drift at Washington, caused a special committee to be appointed by the President of the Association to join with other business bodies in protest against any further political raids upon American business. This committee has supported the action taken by the Chambers of Commerce of Boston and Providence and the Board of Trade of Philadelphia against the Administration bills. In Boston the Board of Directors of the Chamber of Commerce recommended that the Chamber oppose particularly the establishment of an Interstate Trade Commission at this especial time. The considerations that led to the making of this recommendation as expressed by the directors of the Boston Chamber were as follows:

Resolved: That in the opinion of the Board of Directors of the Boston Chamber of Commerce —

(1.) What the country needs at the present time is a rest from new legislation affecting business, and an opportunity to adjust itself to the new conditions created by recent Federal

legislation, such as the income tax, the revision of the tariff, and the currency law.

(2.) There is not sufficient time during the present session of Congress to consider, with the deliberation to which it is entitled, the matter of so-called trust regulation or any general legislation contemplating changes in, or additions to, the present restrictions on interstate or foreign trade.

(3.) Accordingly the Board of Directors is opposed to the consideration or enactment of any form of such legislation dur-

ing the present session of Congress.

(4.) The whole subject of such legislation should be postponed until the next session of Congress, and in the meantime Congress by its committee should take the opportunity to invite the coöperation of business men throughout the country, in framing needful legislation.

A special committee appointed to consider the subject divided over the question, the majority sustaining the idea of a trade commission and the minority opposing it — but the majority even of this committee expressed its conviction "that additional drastic anti-trust laws such as those provided in the pending Newlands and Clayton bills, prohibiting holding companies and interlocking directors, etc., are not desirable or proper at the present time."

But the members of the Boston Chamber of Commerce, at a well-attended representative meeting, refused to approve even the idea of a trade commission. The question was exhaustively debated on both sides, and at the conclusion of the discussion the Boston Chamber voted 91 to 22 to approve the majority report of the directors, and to oppose the establishment of an Interstate Trade Commission as provided in the Administration bill before Congress.

Action along similar lines was taken also by the Board of Trade of Philadelphia and the Chamber of Commerce of Providence. The wool manufacturers of the country, in opposing radical anti-corporation legislation at Washington, have not stood alone but have worked together with other representatives of the principal industries of the United States.

The Chamber of Commerce of the United States, which is supposed to be not unfriendly to President Wilson and his Administration, has recently announced the result of its national referendum of commercial bodies relative to certain proposals in the Clayton anti-corporation bill, which has passed the House

and is under consideration in the Senate. No fewer than 559 commercial bodies in 36 States covering the entire country were consulted, and these sane and responsible business men recorded themselves against the various features of the Clayton bill by overwhelming majorities, ranging all the way on the different subjects from six or seven to one, to fifteen to one. Such demonstrations have frightened President Wilson and compelled a modifying of some features of the proposed law, but what business men demand is that the entire ill-advised effort be abandoned.

#### PURE CLOTH BILLS IN CONGRESS.

### A RENEWAL OF IMPRACTICABLE SCHEMES — A REALLY SOUND BASIS OF LEGISLATION.

With the pure food law as an ostensible precedent, some public men of the Middle West in Washington have for a year or two been endeavoring to secure a so-called pure fabric law. There would be no objection from manufacturers to a really honest, practicable and efficient measure to prevent misrepresentation in the sale of merchandise, but the plans presented by men wholly unfamiliar with manufacturing conditions have been so wild and impracticable that very little headway has thus far been made in arousing public interest and support, although several hearings on the Lindquist and other "labeling" bills have been held before the House Committee on Interstate and Foreign Commerce in Washington.

Five or six different proposals have been introduced in the National Senate or the National House or in both bodies. There is a certain family resemblance among them, but the bill (H. R. 4981) of Representative Lindquist, a clothing manufacturer of Michigan, has been the most conspicuous. Its purpose is to provide "for the labeling, marking, and tagging of all fabrics and leather goods," and its exact text is as follows:

#### A BILL

PROVIDING FOR THE LABELING, MARKING, AND TAGGING OF ALL FABRICS AND LEATHER GOODS AS HEREINAFTER DESIGNATED, AND PROVIDING FOR THE FUMIGATION OF SAME.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That it shall be unlawful for any person to misrepresent in manufacturing, selling, trading, or exchanging within any Territory or the District of Columbia any fabric or article hereinafter named of wool, eotton, silk, linen, fiber, or leather. in whole or in part, which is misbranded within the meaning of this Act, to wit: Men's, women's, and children's clothing, underwear, hosiery, shirts, shirt waists, lingerie, night robes, bath robes, pajamas, sweaters, corsets, shawls, gloves, handkerchiefs, mittens, blankets, quilts, and all bed furnishings, rugs, carpets, curtains, draperies, tablecloths, table covers, napkins, dollies, dresser covers, towels, and all textile fabries sold by the bolt or yard; boots, shoes, sandals, leggings, grips, handbags, valises, trunks, gloves, mittens, belts, cushions, buggies, auto tops, harness, and all furniture made in part of leather; and any person who shall violate any of the provisions of this section shall be guilty of a misdemeanor, and for the first offense shall, upon conviction thereof, be fined not to exceed \$2,000, or shall be sentenced to one year's imprisonment, or both such fine and imprisonment, in the discretion of the court; and for each subsequent conviction thereof shall be fined not to exceed \$5.000, or sentenced to one year's imprisonment, or both such fine and imprisonment, in the discretion of the court.

That the introduction into any State or Territory or the Sec. 2. District of Columbia from any other State or Territory or the District of Columbia, or from any foreign country, of any fabric or leather article designated in section one of this Act, intended for sale, trade, or exchange, which is misbranded within the meaning of this Act, is hereby prohibited; and any person who shall ship or deliver for shipment from any State or Territory or the District of Columbia or to a foreign country, or who shall receive in any State or Territory or in the District of Columbia or foreign country, or offer to deliver to any other person any such article so misbranded within the meaning of this Act, or any person who shall sell or offer for sale in the District of Columbia or the Territories of the United States any such misbranded articles, or export or offer to export the same to any foreign country, shall be guilty of a misdemeanor, and for such offense be fined not exceeding \$500 for the first offense, and upon conviction for each subsequent offense not exceeding \$1,000, or be imprisoned not exceeding one year, or both, in the discretion of the court.

Sec. 3. That the introduction into any State or Territory or the District of Columbia from any other State or Territory or the District of Columbia, or from any foreign country of any manufactured textile articles designated in section one of this Act which have not been properly fumigated and which are intended for sale, trade, or exchange, which is misbranded within the meaning of this Act, is hereby prohibited; and any person who shall ship or deliver for shipment from any State or Territory or the District of Columbia or to a foreign country, or who shall receive in any State or Territory or in the District of Columbia or foreign country, and having so received shall deliver, or offer to deliver, to any other person any such article so misbranded within the meaning of this Act, or any person who shall sell, or offer for sale, in the District of Columbia or the Territories of the United States any such misbranded articles, or export or offer to export the same to any foreign country shall be guilty of a misdemeanor, and for such offense shall be fined not exceeding \$500 for the first offense, and upon conviction for each subsequent offense not exceeding \$1,000, or be imprisoned not exceeding one year, or both, in the discretion of the court: Provided, That only such articles shall be required to be fumigated as will not be injured or impaired in value by such fumigation. and the Bureau of Chemistry of the Department of Agriculture is hereby empowered and directed to ascertain and determine what articles shall be exempted from fumigation.

Sec. 4. That the Secretary of the Treasury, the Secretary of Agriculture, and the Secretary of Commerce shall make uniform rules and regulations for carrying out the provisions of this Aet, including the collection and examination of specimens of articles, designated in section one of this Act, which are manufactured or offered for sale in the District of Columbia, or in the Territories of the United States, or which shall be offered for sale in any other State other than that in which they shall have been respectively manufactured or produced, or which shall be received from any foreign country, or intended for

shipment to any foreign country.

SEC. 5. That the examination of specimens of articles shall be made in the Bureau of Chemistry of the Department of Agriculture, or under the direction and supervision of such bureau, for the purpose of determining from such examination whether such articles are misbranded within the meaning of this Act; and if it shall appear from such examination that any of such specimens are misbranded within the meaning of this Act, the Secretary of Agriculture shall cause notice thereof to be given to the party from whom such sample was obtained. Any party so notified shall be given an opportunity to be heard, under such rules and regulations as may be prescribed aforesaid, and if it appear that any of the provisions of this Act have been violated by such party, then the Secretary of Agriculture shall certify at once the facts to the proper United States district attorney, with a copy of the results of the analysis or the examination of such articles duly authenticated by the analyst or officer making such examination, under oath of such officer. After judgment of the court, notice shall be given by publication in such manner as may be prescribed by the rules and regulations aforesaid.

Sec. 6. That it shall be the duty of each district attorney to whom the Secretary of Agriculture shall report any violation of this Act to cause appropriate proceedings to be commenced in the proper courts of the United States without delay for enforcement of the penalties as in

such case herein provided.

Sec. 7. That the term "pure wool" as used in this Act shall be held to mean sheep's wool which has not been previously used in the

manufacture of any other article or fabric.

That the term "pure silk" as used in this Act shall be held to mean either a reeled or spun silk from the cocoon of the silkworm, and that the component part of silk thereof does not contain more than its original gum weight.

SEC. 9. That the term "pure cotton" as used in this Act shall be

held to mean pure cotton exclusive of sizing.

SEC 10. That the term "pure linen" as used in this Act shall be

held to mean pure linen exclusive of sizing and substitutes.

That leather impregnated with glucose, sulphate of mag-SEC. 11. nesia, sulphate of barium, or containing excessive amounts of other salts or acids or other materials which are not essential in the proper tanning of leather and which add weight to the same, shall be deemed

to be "adulterated leather."

Sec. 12. That for the purposes of this Act any manufacturer of fabrics, or any person who makes any article for sale, trade, or exchange and for shipment as provided in section two of this Act, shall mark, label, or tag such goods in plain letters and figures which cannot be detached except by design, and the mark, label, or tag shall designate the constituent fibers of which such goods are composed in whole or in part.

SEC. 13. That all wool fabrics or articles designated in section one of this Act which are composed wholly of pure wool shall be marked, tagged, or labeled in plain letters "pure wool," and that all fabrics and articles composed in part of pure wool, pure silk, pure cotton, pure linen, or any other vegetable, animal, or mineral substances shall be marked, tagged, or labeled in plain letters showing all constituents contained therein; and that all fabrics and articles composed wholly of pure cotton shall be marked, tagged, or labeled "pure cotton;" and should they be sized, they shall be marked, tagged, or labeled "cotton sized," with the net weight of the same as woven and the gross weight sized, and should they contain any pure wool, pure silk, pure linen, or any other vegetable, animal, or mineral substances, they shall be marked, tagged, or labeled in plain letters showing all constitutents contained therein; and that all fabrics and articles composed wholly of pure linen shall be marked, tagged, or labeled "pure linen;" and should they be sized, they shall be marked, tagged, or labeled "linen sized," with the net weight of same as woven and the gross weight sized, and should they contain any pure wool, pure silk, pure cotton, or any other vegetable, animal, or mineral substances they shall be marked, tagged, or labeled in plain letters showing the constituents contained therein; and that all articles composed wholly of pure silk shall be marked, tagged, or labeled "pure silk," and should they contain any pure wool, pure cotton, pure linen, or any other vegetable, animal, or mineral substances they shall be marked, tagged, or labeled in plain letters showing all constituents contained therein, and if weighted, the amount of weighting shall be shown: and that all articles composed wholly of unadulterated leather shall be marked, tagged, or labeled in plain letters "unadulterated leather," and that all articles composed in part of unadulterated leather and in part of adulterated leather, or such other vegetable, animal, or mineral substances shall be marked, tagged, or labeled in plain letters "adulterated" or "substituted leather," and the mark, tag, or label shall show all constituents contained therein; and that all boots and shoes in which the counter, insole, outsole, middle sole, slip sole, and outer surface of the shoe is not composed of unadulterated leather shall be marked, tagged, or labeled in plain letters "adulterated" or "substituted leather," and the mark, tag, or label shall show all constituents contained therein: Provided, That it shall not be required to separately mark, tag, or label any textile fabric used in the manufacture of the shoe. And for the purposes of this Act a fabric or article which is marked, tagged, or labeled so as to show that the fabric or article is of one material wholly when it is of two or more fibers or ingredients, as defined in this Act, shall be deemed to be misbranded: Provided further, That in branding articles of wearing apparel, only the outer surface and body linings of the same shall be considered, and the constituent parts of said outer surface and body linings shall be shown upon the mark, tag, or label.

Sec. 14. That any person defacing, mutilating, obscuring, concealing, effacing, canceling, or removing any mark, tag, or label provided for by this Act, or causing or permitting the same to be done, with intent to mislead, deceive, or to violate any of the provisions of this Act, shall be guilty of a misdemeanor, and for the first offense shall, upon conviction thereof, be fined not to exceed \$2,000, or shall be sentenced to one year's imprisonment, or both such fine and imprisonment, in the discretion of the court, and for each subsequent conviction thereof shall be fined not to exceed \$5,000, or sentenced to one year's imprisonment, or both such fine and imprisonment, in the discretion of the

court.

SEC. 15. That no dealer shall be prosecuted under the provisions of this Act when he can establish a guaranty, signed by the wholesaler, jobber, or manufacturer, or other party residing in the United States from whom he purchased such articles, to the effect that the same is not misbranded within the meaning of this Act, designating it. Said guaranty, to afford protection, shall contain the name and address of the party or parties making the sale of such article to such dealer, and in such case said party or parties shall be amenable to the prosecutions, fines, and other penalties which would attach in due course to the

dealer under the provisions of this Act.

SEC. 16. That any fabric or article designated in section one of this Act that is misbranded within the meaning of this Act and is being transported from one State, Territory, District, or insular possession to another for sale, or, having been transported, remains unloaded, unsold, or if it be sold or offered for sale in the District of Columbia or the territory or other insular possessions of the United States, or if it be imported from a foreign country for sale, or if it be intended for export to a foreign country, shall be liable to be proceeded against in any district court of the United States within the district where the same is found and seized for confiscation by a process of libel for condemnation. And if such article or fabric is condemned as misbranded within the meaning of this Act, the same shall be disposed of by sale as the said court may direct, and the proceeds thereof, if sold, less the legal costs and charges, shall be paid into the Treasury of the United States, but such goods shall not be sold in any jurisdiction contrary to the provisions of this Act: Provided, however, That upon the payment of the costs of such libel proceedings and the execution and delivery of a good and sufficient bond to the effect that such fabrics or articles shall not be sold or otherwise disposed of contrary to the provisions of this Act, the court may by order direct that such fabrics and articles be delivered to the owner thereof. The proceedings of such libel cases shall conform as nearly as may be to the proceedings in admiralty, except that either party may demand trial by jury of any issue of fact joined in the case, and all such proceedings shall be at the suit of and in the name of the United States.

That the Secretary of the Treasury shall deliver to the Secretary of Agriculture, upon his request from time to time, samples of fabrics and articles which are being imported into the United States or offered for import, giving notice to the owner thereof or consignee, who may appear before the Secretary of Agriculture and have the right to introduce testimony. And if it appear from the examination of such sample that any fabric or article offered to be imported into the United States is misbranded within the meaning of this Act, or is otherwise falsely labeled in any respect, said fabric or article shall be refused admission, and the Secretary of Agriculture shall refuse delivery to the consignee, and shall cause to be sold, after being properly labeled, any goods refused delivery which shall not be exported by the consignee within three months of the date of notice of such refusal, under such regulations as the Secretary of the Treasury may prescribe: Provided, That the Secretary of the Treasury may deliver to the consignee such goods, pending examination and decision in the matter, upon the execution of a penal bond for the amount of the full invoice value of such goods, together with the duty thereon, and on the refusal to return such goods for any cause to the custody of the Secretary of the Treasury when demanded for the purpose of excluding them from the country or for any other purpose said consignee shall forfeit the full amount of the bond:

And provided further, That all charges for storage, cartage, and labor on goods which are refused admission or delivery shall be paid by the owner or consignee, and in default of such payment shall constitute a lien against any future importations made by such owner or consignee.

SEC. 18. That nothing in this Act shall be construed as requiring the marking, tagging, or labeling of any fabric or article not manufactured or made for sale, trade, or exchange, or for the marking, tagging, or labeling of any fabric or article not introduced or shipped into any State from any other State or from any foreign country, or not shipped to any foreign country: Provided, That any fabric or article designated in section one of this Act, that is sold at retail by the dozen or fraction thereof shall not be required to be separately marked, tagged, or labeled if the box containing the same is properly branded and shown to the purchaser; and that all fabrics sold at retail by the bolt or yard shall be branded on the outside of the bolt or package containing the same, and shall be open to the inspection of the purchaser.

SEC. 19. That the term "Territory" as used in this Act shall include the insular possessions of the United States. The word "person" as used in this Act shall be construed to import both the plural and the singular, as the case demands, and shall include corporations, companies, societies, and associations. When construing and enforcing the provisions of this Act, the act, omission, or failure of any officer, agent, or other person acting for or employed by any corporation, company, society, or association, within the scope of his employment or office, shall be also deemed in every case to be the act, omission, or failure of such corporation, company, society. or association, as well as that of the person.

Sec. 20. That for all fabrics or articles manufactured, or in process of manufacture therefrom, required by this Act to be labeled, which were manufactured prior to the passage of this Act and which had passed out of the hands of the manufacturer thereof and the ingredients or component parts of which are not known by the owner, merchant, or custodian thereof, a label, mark, or tag may be affixed as provided in this Act, bearing the words "Manufactured prior to the pure fabric and leather Act, composition not known," which for such fabrics or articles shall be a compliance with this Act.

SEC. 21. That this Act shall be in force and effect from and after the first day of January, nineteen hundred and fourteen.

The paragraphs of especial significance to wool manufacturers are Sections 7 and 13 of the Lindquist measure. Section 7 provides that "the term 'pure wool' as used in this Act shall be held to mean sheep's wool which has not been previously used in the manufacture of any other article or fabric." This, literally interpreted, would forbid the acceptance as pure wool of noils or other by-products or wastes of manufacture, though these are, in fact, pure, new wool improved beyond the scoured condition. Any fabrics, therefore, in which noils or other by-products or wastes were embodied would have to be marked as if they were mixed goods, not composed entirely of "pure wool." This circumstance, and the further fact that in practice it would be

impossible for manufacturers to know or designate the exact per cent of new wool, noils, silk or other materials of the finished fabric, constitute, from the standpoint of the manufacturers, conclusive objections to the Lindquist bill, though there are other serious faults of the proposal. A request has been made to the House Committee on Interstate and Foreign Commerce in Washington for a hearing on behalf of the National Association of Wool Manufacturers, in case the consideration of the subject is renewed at the present session of Congress.

Promoters of this pure cloth-pure shoe legislation caused a resolve endorsing the Lindquist bill and calling upon Congress to enact it to be introduced early in the year in the Massachu-It was shrewdly believed by those who sought setts legislature. to advance the Lindquist bill that approval of it from the Commonwealth, which was not only the first cotton and woolen manufacturing but the first boot and shoe manufacturing State in the Union, would give a great impetus to their cause in Washington. The resolve was referred in the Massachusetts legislature to the Committee on Federal Relations, which happened to be evenly divided between Republican membership on the one hand and Progressive and Democratic membership on the other. A hearing on the resolve was set for February 18, and at that time the Secretary of this Association appeared and entered formal remonstrance against the resolve, stating the grounds of objection to it, but declaring that the wool manufacturers of the country were not opposed to a law based on the general principles of the welltested British Merchandise Marks Act, forbidding misrepresentation in the advertising or sale of any merchandise. At the same time another remonstrance was made by Mr. Samuel S. Dale, the editor of the "Textile World Record" of Boston, who had prepared a pamphlet stating the main facts in the case. This pamphlet was sent to all the members of the legislature and to others interested. Several of the leading boot and shoe manufacturers of New England appeared in protest at the same hearing.

The legislative committee, after some weeks of deliberation, finally ordered an adverse report on the resolve in favor of the Lindquist bill. Meanwhile a resolve on behalf of another measure (H.R. 13492), offered in the National House by Hon. John Jacob Rogers, of the Lowell District in Massachusetts, had been introduced in the Massachusetts House and had won much favor

there. The Rogers bill is based on principles embodied in the British Merchandise Marks Act. Its full text is as follows:

#### A BILL

TO PREVENT THE MANUFACTURE, SALE, OR TRANSPORTATION OF MIS-BRANDED ARTICLES, AND FOR REGULATING THE TRAFFIC THEREIN, AND FOR OTHER PURPOSES.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That it shall be unlawful for any person to manufacture within any Territory or the District of Columbia any article which is misbranded within the meaning of this Act; and any person who violates any of the provisions of this section shall be guilty of a misdemeanor and for each offense shall, upon conviction thereof, be fined not to exceed \$1,000 or shall be sentenced to imprisonment for a term not exceeding two years, or shall be punished by both such fine and imprisonment, in the discretion of the court; and for each subsequent offense shall, upon conviction thereof, be fined not less than \$2,500 or shall be sentenced to one year's imprisonment, or shall be punished by both such fine and imprisonment, in the discretion of the court.

SEC. 2. That the introduction into any State or Territory or the District of Columbia, from any other State or Territory or the District of Columbia, or from any foreign country or the shipment to any foreign country of any article which is misbranded, within the meaning of this Act, is hereby prohibited; and any person who shall ship or deliver for shipment from any State or Territory or the District of Columbia to any other State or Territory or the District of Columbia, or to a foreign country, or who shall receive in any State or Territory or the District of Columbia from any State or Territory or the District of Columbia, or from any foreign country, and having so received, shall deliver, in original unbroken packages, for pay or otherwise, or offer to deliver to any other person, any such article so misbranded, within the meaning of this Act, or any person who shall sell or offer for sale in any Territory or the District of Columbia any such article so misbranded, within the meaning of this Act, or export or offer to export the same to any foreign country, shall be guilty of a misdemeanor and for such offense shall, upon conviction thereof, be fined not to exceed \$1,000 or shall be sentenced to imprisonment for a term not exceeding two years, or shall be punished by both such fine and imprisonment, in the discretion of the court; and for each subsequent offense shall, upon conviction thereof, be fined not less than \$2,500 or shall be sentenced to one year's imprisonment, or shall be punished by both such fine and imprisonment, in the discretion of the court.

Sec. 3. That the Secretary of Commerce shall make rules and regulations for carrying out the provisions of this Act, including the collection and examination of articles which are manufactured or offered for sale in any Territory or the District of Columbia, or which shall be offered for sale in unbroken packages in any State other than that in which they shall have been respectively manufactured or produced, or which shall be received from any foreign country, or intended for shipment to any foreign country, or which may be submitted for examination by the appropriate officer of any State or Territory or the District of Columbia, or at any domestic or foreign port through which such

articles may be offered for interstate commerce, or for export or import

between the United States and any foreign port or country.

SEC. 4. That the examinations of any such specimens of articles shall be made under the direction and supervision of the Secretary of Commerce for the purpose of determining whether such articles are misbranded within the meaning of this Act; if it shall appear from any such examination that any of such specimens are misbranded within the meaning of this Act, the Secretary of Commerce shall cause notice thereof to be given to the person from whom such sample was obtained. Any person so notified shall be given an opportunity to be heard, under such rules and regulations as may have been prescribed as aforesaid, and if it appears that any of the provisions of this Act have been violated, the Secretary of Commerce shall at once certify the facts to the proper United States district attorney, with a copy of the results of the examination of such article duly authenticated by the officer making such examination under the oath of such officer. After judgment of the court, notice shall be given by publication in such manner as shall be prescribed by the rules and regulations aforesaid.

Sec. 5. That it shall be the duty of each district attorney to whom the Secretary of Commerce shall report any violation of this Act, or to whom the appropriate officer of any State, Territory, or the District of Columbia shall present satisfactory evidence of any violation of this Act to cause appropriate proceedings to be commenced and prosecuted in the proper courts of the United States without delay for the enforce-

ment of the penalties herein provided.

SEC. 6. That the term "misbranded," as used herein, shall include any false, inaccurate, or misleading description, false, inaccurate, or misleading statement or other false, inaccurate, or misleading indication as to number, quantity, measure, gauge, or weight of any articles, as to the place or country in which any articles were manufactured or produced, as to the mode of manufacturing or producing any articles, as to the materials of which any articles are composed, or as to any articles being the subject of an existing patent or copyright, whether such description, statement, or other indication is applied to the articles themselves or to any covering, package, or label in which such articles are sold or offered for sale. Such articles shall also be said to be misbranded if they are imitations of or offered for sale under the name of another article, or if the contents of the package as originally put up shall have been removed in whole or in part or other contents substi-tuted therefor, or if the covering, package, or label shall contain any statement, design, or device which is false and fraudulent in any particular. Such articles shall also be said to be misbranded if there are applied thereto figures, words, or marks or any arrangement or combination thereof, whether including a trade-mark or not, which are reasonably calculated to lead persons to believe that they are the manufacture or merchandise of some person other than the person whose manufacture or merchandise they in fact are. Such articles shall also be said to be misbranded if there are applied thereto the name or initials of any person in any false, inaccurate, or misleading manner. A description, statement, or other indication shall be said to be applied to an article within the meaning of this Act if it is woven, impressed, worked into, annexed, or affixed to such article or to any covering, package, or label thereof.

SEC. 7. That no dealer shall be prosecuted under the provisions of this Act if he can produce a guaranty signed by the wholesaler, jobber, manufacturer, or any other person residing in the United States from

whom he purchases such articles, that the same are not misbranded within the meaning of this Act. Such guaranty to afford protection shall contain the name and address of the person selling such articles to such dealer, and in such case such person shall be subject to the prosecutions, fines, and other penalties which would otherwise attach to said

dealer under the provisions of this Act.

SEC. 8. That any article which is misbranded within the meaning of this Act and shall be transported for sale from one State or Territory or the District of Columbia to any other State or Territory or the District of Columbia or, having been transported, remains unloaded, unsold, or in the original unbroken packages, or if it be sold or offered for sale in any Territory or the District of Columbia, or if it be imported for sale from a foreign country, or if it be intended for export to a foreign country, shall be liable to be proceeded against in any district court of the United States within the district where the same is found, and seized for confiscation by a process of libel for condemnation. And if such article is condemned as being misbranded within the meaning of this Act, the same shall be disposed of by destruction or sale, as the court may direct, and the proceeds thereof, if sold, less the legal cost and charges, shall be paid into the Treasury of the United States; but such goods shall not be sold in any jurisdiction contrary to the provisions of this Act or the laws of that jurisdiction: Provided, however, That upon the payment of the costs of such libel proceedings and the execution and delivery of a good and sufficient bond to the effect that such articles shall not be sold or otherwise disposed of contrary to the provisions of this Act, or the laws of such jurisdiction, the court may by order direct that such articles be delivered to the owner The proceedings of such libel cases shall conform, as nearly as may be, to the proceedings in admiralty, except that either party may demand trial by jury of any issue of fact joined in any such ease, and all such proceedings shall be at the suit of and in the name of the United States

That the Secretary of the Treasury shall deliver to the Sec. 9. Secretary of Commerce, upon his request from time to time, samples of articles which are being imported into the United States or offered for import, giving notice thereof to the owner or consignee, who may appear before the Secretary of Commerce and have the right to introduce testimony. If it appear from the examination of such samples that any article which is being imported into the United States or offered for import is misbranded within the meaning of this Act, the said article shall be refused admission, and the Secretary of the Treasury shall refuse delivery to the consignee and shall cause the destruction of any goods so refused delivery which shall not be exported by the consignee within three months from the date of notice of such refusal under such regulations as the Secretary of the Treasury may prescribe: Provided, That the Secretary of the Treasury may deliver to the consignee such goods pending examination and decision upon the execution of a penal bond for the amount of the full invoice value of such goods, together with the duty thereon. On refusal to return such goods for any cause to the custody of the Secretary of the Treasury, when demanded, for the purpose of excluding them from the country, or for any other purpose, said consignee shall forfeit the full amount of the bond: And provided further. That all charges for storage, eartage, and labor on goods which are refused admission or delivery shall be paid by the owner or consignee, and in default of such payment shall constitute a lien against any future importation made by such owner or consignee.

Sec. 10. That the term "Territory" as used in this Act shall include the insular possessions of the United States. The word "person" as used in this Act shall be construed to import both the plural and the singular, as the case demands, and shall include corporations, companies, societies, and associations. When construing and enforcing the provisions of this Act the act, omission, or failure of any officer, agent, or other person acting for or employed by any corporation, company, society, or association within the scope of his employment of office shall in every case be also deemed to be the act, omission, or failure of such corporation, company, society, or association as well as that of the person.

SEC. 11. That nothing in this Act shall be construed to repeal, amend, or affect the provisions of an Act approved June thirtieth, nineteen hundred and six, entitled "An Act for preventing the manufacture, sale, or transportation of adulterated or misbranded or poisonous or deleterious foods, drugs, medicines, and liquors, and for regulating traffic therein, and for other purposes."

SEC. 12. That this Act may be cited as "the misbranding Act."

Sec. 13. That this Act shall be in force and effect six months after its approval.

The Rogers bill is superior to the Lindquist bill not only in point of practicability, but also in the fact that it is not confined to the textile and boot and shoe trades, but covers fairly the whole field of manufacturing.

The Massachusetts House, on May 1, by a decisive vote accepted the adverse report of the committee on the resolve in favor of the Lindquist bill, and signified its unwillingness to approve the Rogers measure, which had not been formally before the committee. It is quite possible that agitation for a pure cloth labeling law will be continued in Washington and elsewhere, and it behooves manufacturers to be vigilant against unjust and impracticable legislation. If any law is enacted it must be a law that is fair and will work — and for American legislation along this line there is no better precedent than the British Merchandise Marks Act of 1887, which has been thoroughly tested in the courts of law and has satisfied all reasonable expectations.

#### AMERICAN VERSUS ENGLISH BUNTING.

SECRETARY DANIELS AND HIS SURRENDER TO THE PROTEST OF PATRIOTIC SENTIMENT.

Many years ago Dr. John L. Hayes, the first Secretary of the National Association of Wool Manufacturers, said in an address at Philadelphia:

To our shame be it spoken, all our flags are grown, spun, woven and dyed in England, and on the last Fourth of July the

proud American ensigns, which floated over every national ship, post and fort, and every patriotic home, flaunted forth upon the breeze the industrial dependence of America on England.

That was in the year 1865, at the close of the Civil War, and it was indeed a shame and a humiliation to which Dr. Hayes alluded, for throughout the war the sympathy of the "ruling classes" of England and most of her manufacturers and merchants with the Southern Confederacy had been made manifest—the industrial North was hated and feared, and its downfall was frankly proclaimed time and time again in Parliament as the greatest boon that could be conferred on the trade and commerce of the United Kingdom. Dr. Hayes merely reflected the prevalent resentment of the North in the heat and emphasis of his protest against our dependence for our national colors on a nation which might at any moment have become our armed enemy.

Indignation at the unworthy course which a large part of Great Britain had played in the Civil War was unquestionably one factor, and a powerful one, in the establishment of the American system of protection on a firm basis after the war had ended. One result of that protective legislation, of which Abraham Lincoln was a life-long champion, was the encouragement of the bunting manufacture in the United States, so that before many years English-made flags were no more displayed over our national ships, forts, and garrisons. Nobody could then have predicted that a National Administration in the year of grace 1914 would deliberately propose to return to that galling "industrial dependence of America on England," which in 1865 evoked the ire of Dr. Hayes and his patriotic audience.

The Secretary of the Navy in President Wilson's Cabinet is the Hon. Josephus Daniels, of North Carolina, an editor of an excellent daily newspaper at Raleigh, a gentleman of originality and force of character, a devoted admirer and follower of the Hon. William J. Bryan, but unfortunately without previous broad experience in larger public affairs. It occurred to Secretary Daniels that it would be rather a fine thing to invite bids from abroad for certain materials and supplies required by the Navy Department, which under the unbroken policy of his protectionist predecessors, including that very able and distinguished Democrat, the Hon. William C. Whitney, had been procured from American manufacturers. Economy was the ostensible motive of the new

departure, although the total appropriations of President Wilson's Congress were steadily breaking all records, and there was much flourishing of trumpets in the faithful party press when the news was given out by Secretary Daniels that several thousand dollars had been "saved" by placing orders with Englishmen for certain armor-piercing projectiles and turbine machinery.

Thus encouraged, Mr. Daniels moved on to new "economy." He caused English manufacturers, whose wage scale is half or less than half of the American rate, to proffer bids for a considerable quantity of the bunting out of which the ensigns and signals of our war fleet are fashioned, and much to his gratification he discovered that the English prices undercut the American figures by quite a substantial difference. In brief, the firm of C. B. Brooks & Company, of Bradford, Yorkshire, agreed to furnish the bunting desired (290,000 yards) for \$25,617, if it were imported duty free. A New York importing house, acting for various other English mills, offered to supply the bunting at a price ranging from \$29,462 to \$40,131. The lowest American bid was \$44,625—and the word went out from Washington that Secretary Daniels proposed to award the contract to the Englishmen.

This was apparently too much for the faithful party organs, for no pean of rejoicing arose as had followed the award to English firms of "economical" contracts for engines and projectiles. Instead, there was an ominous silence, broken promptly by the public and formal protest of Representative John Jacob Rogers, of the Lowell district in Massachusetts, where bunting for the American navy and army had been manufactured for half a century. "May I respectfully call your attention," wrote Congressman Rogers to Secretary Daniels, "to what it seems to me would generally be regarded as a most unfortunate state of affairs, if, especially when this country is virtually at war, it were understood that the United States was buying bunting for its flags made in English factories." The shot must have gone home. It was speedily followed by a memorial from the Massachusetts House of Representatives, introduced by a Democrat and adopted by an almost unanimous vote, protesting against the contemplated action of the Secretary as wholly unwise and un-American. Remonstrances began to pour into the Navy Department from Democratic Senators and Representatives in Congress who were looking to the November elections with much trepidation over the hauling down of the American flag in the Panama tolls dispute and could not be convinced that "national honor" demanded the fabrication of the flag from English bunting.

These broadsides of offended patriotism were clearly too heavy to be resisted, for a few days thereafter Acting Secretary Roosevelt, whom Mr. Daniels put forward as his flag-of-truce bearer, announced that the award would not be made to English manufacturers, and the gathering typhoon blew over — very much to the disgust, doubtless, of those "economists" who had counted on applying the sundry thousand dollars of difference between the American and English bids to the "improvement" of Gudgeon Creek in Buncombe County or the enhancing of the official stipends of some good Democratic fourth-class postmasters.

Yet a fundamental principle of the economic faith of President Wilson and Secretary Daniels had been ruthlessly deserted and betrayed. For seventy or eighty years the school of thought of which these gentlemen are perhaps the most distinguished modern exponents had been proclaiming that everything ought to be bought where it can be bought most cheaply, and that any interference with that elementary human right by means of a protective tariff was, to quote the party platform, utterly "iniquitous and unconstitutional." The illustrious Secretary of the Navy abandoned his guns and hauled down the flag of two generations of doughty political ancestors when he determined that it was safer and wiser after all to buy American bunting from Massachusetts mills instead of "cheaper" bunting from Yorkshire. His were not "fast" colors. They "ran" when they were tried.

The whole episode was an illuminating one. Intrinsically there is no more reason why bunting for our navy flags should not be bought abroad if it can be procured more cheaply there than why we should not go abroad for armor-piercing shells or ship machinery. Indeed, it would undeniably be more dangerous and indefensible to depend upon foreigners for the ordnance and engines of our war fleet than for bunting, for which in need some other fabric could be substituted. But a sentiment attaches to the flag which does not apply to masses of hardened steel, and so Secretary Daniels, who was adamant against economic argument and prosaic engineering facts, surrendered to romance—like a true knight of Southern chivalry.

# THE SILK ASSOCIATION OF AMERICA. A RECORD OF ITS MANIFOLD ACTIVITIES DURING THE PAST YEAR.

The forty-second annual report of the Silk Association of America reviews a year — 1913 — which was characterized at the outset by serious labor troubles in the Hudson County and Paterson silk mills, and closed with quite an encouraging condition of activity. The fashions have been markedly in favor of the silk industry for some time past.

As Secretary Ramsay Peugnet says in his report: "The notable revival in dancing, which has come about through the introduction of the tango and other South American dances, has had somewhat of a stimulative effect upon the silk industry by reason of the greater number of dancing gowns required, not only by women of fashionable society, but also by women of moderate means, who dine out much more than formerly. The custom of dancing in the afternoon as well as at dinner and after the theatre has become almost universal in New York City, and the craze for this form of amusement is rapidly spreading to other cities and towns throughout the country. Every woman who yields herself to this most popular fad needs a much larger wardrobe, which usually means a greater variety of dancing and dinner costumes of silk. In order to meet this situation our silk manufacturers have brought out many fabrics especially designed for dancing gowns. Not only has the increased popularity of dancing stimulated our industry, but the great dressmakers of Paris have almost outdone themselves in bringing out original and fascinating creations in silks and satins. The influence of Oriental fashions together with the new Impressionistic tendencies in art have combined in an altogether unusual manner to produce this effect."

All in all it has been a notable year in the silk manufacture, for the secretary of the Silk Association further says: "Never has the search for the original, the beautiful and startling as well as the graceful and the picturesque, been so urgent and so persistent. Old books, old pictures, old manuscripts, old pottery, and all kinds of art objects of every race, not to speak of the entire realm of nature, are all yielding ideas for the adornment of the woman of to-day. The spring season through which we have just passed has been in a great measure devoted to chiffon taffetas. Orders for these fabrics for wear the coming summer

have been very large and practically to the exclusion of the messalines and satins which were worn so much during the winter. These taffetas lend themselves very readily to the so-called 'fashions of our grandmothers,' which are coming in, although we doubt somewhat whether our grandmothers would recognize many of these fashions as belonging to them. It is true that wigs are being worn and the hair is being powdered but not in the subdued and aristocratic white of the olden days. We see yellow, green or violet wigs or the hair powdered in a shade to match milady's gown or slippers."

On the subject of the new revenue law the Silk Association is fortunate that "a greater degree of the needed protection was granted to silks than to any other branch of the textile industry." But the silk manufacturers came in for a disappointment in that the specific schedule which they had struggled so long and stoutly to secure was not embodied in the new revenue-only legislation. A protest against the impracticable so-called pure fabric bills is entered, and the diverse activities of the Association are duly summarized, with the proceedings at the annual meeting and the annual banquet.

The president of the Silk Association of America is Charles Cheney; the vice-presidents, H. Schniewind, Jr., Louis Stearns, and M. W. Dippel, and the treasurer and secretary, Ramsay Peugnet. The executive committee is composed of Charles Cheney, H. Schniewind, Jr., Louis Stearns, M. W. Dippel, Robert J. F. Schwarzenbach, Catholina Lambert, Jacques Huber, Jerome C. Read, and William Skinner.

The conditioning house at New York receives careful attention in the annual report. The Silk Association of America is to be congratulated upon such a notable record of practical achievements.

#### TEXTILE TRADE DIRECTORIES.

"THE OFFICIAL AMERICAN TEXTILE DIRECTORY," together with the yarn trade index, compiled by the "Textile World Record," is again a complete, exact and valuable publication, for the year 1914. It contains such important features as a buyers' index for machinery and mill supplies; an alphabetical index of all the mills and manufacturers of the United States and Canada; a

statement of the number and kind of mills in each State; a list of textile establishments of the United States arranged by States and towns where they are located, with full data about each mill, and a similar list of the textile establishments of Canada. varn trade index gives the list of mills making various kinds of cotton knitting, cotton weaving, woolen, worsted, silk and linen varns. There are lists also of bleaching, dveing, printing and finishing establishments and of dealers in various raw materials: of manufacturers' selling agents, dry goods commission houses and converters, and finally mills are classified according to goods Every need of the trade is anticipated in this comprehensive volume, which reflects great credit upon its publishers, the Lord & Nagle Company, 144 Congress Street, Boston, Mass. The price of the office edition is \$3, and of the traveler's edition \$2, while there are vest-pocket editions, devoted to New England and Canada, to the Middle States and to the Southern and Western States, which sell for \$1 each.

DOCKHAM'S old and standard directory of the textile manufacture and dry goods trade of the United States and Canada, in its twenty-fourth edition and its fortieth year, for 1913-1914, is a large and handsomely bound volume printed in conspicuously good clear type. It contains an alphabetical list of textile manufacturers, including print works, bleacheries, dyeing establishments, finishing establishments, etc.; a list of cotton dealers and of brokers and converters of cotton goods; a list of commission merchants and manufacturers' agents and of wholesale dry goods houses, and a list of wool dealers, yarn dealers, etc. There are valuable statistical tables of the cotton spindles of the United States, of looms, wool cards and worsted combs. A full text of the tariff act of October 3, 1913, is included in the present vol-The addresses are given of offices of manufacturing companies in Boston, New York, Philadelphia, and Providence, and there is a list of the directors of many of the principal incorporated companies in the textile trade. The volume can be procured of the Dockham Publishing Company, 6 Beacon Street, Boston, Mass.; the price is \$6, and the directory is an important part of the equipment of the manufacturer and merchant.

#### EXPORTS FROM BRADFORD.

WHY A CHANGE WAS NECESSARY IN THE PUBLICATION OF OFFICIAL RECORDS OF THE CONSULAR DISTRICT.

Some surprise was felt a few months ago at the discontinuance of the printing and mailing of the customary monthly statements of declared exports to the United States from the consular district of Bradford, England. Those exports under the new tariff had, of course, assumed greatly increased dimensions, and information concerning them was, therefore, of enhanced value to many American manufacturers and merchants.

A letter of inquiry was addressed from the office of the National Association of Wool Manufacturers to Mr. Augustus E. Ingram, the American Consul at Bradford. In his reply Mr. Ingram says that it is a matter of great regret to him to have to discontinue the printing and mailing of these monthly statements, but the applicants had become so numerous and the expense so heavy that a discontinuance was necessary, particularly in view of the large increase of work at the consular office, involving larger expenditures for printing, postage, etc. During the month of March Consul Ingram received instructions prescribing a uniform system of classification of merchandise to be followed in the declared export returns issued by his as by other consulates, and as this radically changed the form of the monthly statement issued by his office he determined also to put into effect a new and strictly limited system of giving out those statements. But assurance is given by Mr. Ingram that the monthly statements will continue to be sent to the National Association of Wool Manufacturers.

This explanation is altogether satisfactory. It had been felt in some quarters that there might be some disposition in Washington not to publish too widely or too promptly the facts regarding the heavy increases in shipments of manufactures and other merchandise to this country under the new and lowered tariff law, but it is made clear by Mr. Ingram's statement — and he is a long-experienced official, with an eye single to his public duties and the welfare of his country — that the change came about in due, natural course, from perfectly intelligible reasons.

The exports from the Bradford consular district to the United States for the first five months of 1914 compared with the exports of the two years preceding, according to the British Board of Trade, are as follows:

EXPORTS FROM BRADFORD TO THE UNITED STATES OF WOOL AND MANU-FACTURES OF WOOL, FIRST FOUR MONTHS, 1914, 1913, AND 1912, BY MONTHS.

Unit of Quantity.		British and Colonial Wool.	British Wool.	Worsted Yarns.	Worsted Tissues.	Woolen Tissues.  Yards.  000 omitted 982	
		Pounds.	Pounds.	Pounds.	Yards.		
		000 omitted.	000 omitted.	000 omitted.	000 omitted. 4,220		
		8,800	2,600	117			
44	1913.	2,700	1,900	9	1,406	328	
44	1912.	6,700	1,000		1,007	246	
Feb.,	1914.	10,800	1,900	123	2,742	699	
41	1913.	7,300	600		381	220	
6.6	1912.	11,400	1,200	8	634	201	
March,	1914.	9,900	2,000	159	3,102	600	
**	1913.	4,800	800		479	122	
6.6	1912.	7,500	2,100	2	897	211	
April,	1914.	14,600	2,300	172	2,031	464	
44	1913.	4,700	500	9	796	116	
44	1912.	9,000	2,000	10	323	104	
May,	1914.	12,500	2,200	284	1,933	548	
44	1913.	2,500	400	5	675	109	
46	1912.	12,100	1,900	4	532	103	
	Jan. 1 June 1, 14.	56,600	11,000	846	14,028	3,293	
Do.	1913.	23,100	4,200	24	3,737	895	
Do.	1912.	46,800	8,200	24	3,392	866	

#### A WESTERN EDITOR SET RIGHT.

ERRONEOUS STATEMENTS CONCERNING THE EFFECT OF THE NEW TARIFF ON THE WOOL AND WOOLEN INDUSTRY.

ONE of the Republican and protectionist newspapers of the Northwest, the Oshkosh, Wisconsin, "Northwestern," was quoted recently in Congress to the effect that "American woolen

mills are having all they can do. There has been no reduction in profits or dividends, and with assurance of continued prosperity there have been several notable extensions and enlargements of business." In the same connection the "Northwestern" was quoted as declaring that Territory wools had greatly increased in price, and that, therefore, a tariff for revenue only had done no harm to the American wool growing industry.

Because of the official publicity given to these editorial statements, the Secretary of the National Association of Wool Manufacturers sent a letter to the editor of the "Northwestern," asking for his authority for the statements quoted. In reply the editor said that his article was based upon assurances contained in the Minneapolis "Journal," and courteously suggested that a correction from the National Association would be welcomed. Therefore, the following letter was sent:

#### Editor of the "Northwestern":

It is too early yet to look for conclusive tests of the tariff law, but your recent editorial suggestion, that because Montana wools are higher than last year free wool has done the growers no harm, is decidedly misleading. Wools have advanced all over the world, due to the fact that wool production in the world at large has not kept pace with increased population and consumption. But Montana wool, which sells now at 22 cents a pound, brought 25 cents in 1909 when the late Republican tariff was enacted. American mills now have access to the wools of all the world. It is highly probable that Montana wool would bring a higher price if there were a duty on it. It is probable, moreover, that Montana wool will go down in a few weeks and in six months will be considerably lower. This is the expert judgment of the wool-buying trade in Boston and elsewhere.

As to American wool manufacturers, of whom you say that they are "having all they can do," and "There has been no reduction in profits or dividends," the specific returns of the National Association of Wool Manufacturers show that on June 1 about 25 per cent of the looms in this country were idle about 19 per cent of the woolen cards, 15 per cent of the worsted combs, 25 per cent of the woolen spindles and 18 per cent of the worsted spindles. These are abnormal proportions of idleness. They show a distinct depression in the industry, in the country as a whole. Some important concerns have reduced dividends; others have passed them altogether.

When the Simmons-Underwood tariff was being framed, the National Association of Wool Manufacturers presented to Congress specific rates showing how and where the woolen schedule could be reduced with entire justice to wearers of woolen goods and without injustice to American labor. The plan was rejected and a further and excessive reduction was made, some of the consequences of which are now manifest.

A few weeks ago a conference of wool manufacturers and Western wool growers, called by the Department of Agriculture, was held in Washington. Both manufacturers and wool growers agreed that present conditions were unsatisfactory and unsound. The new tariff has not yet been wholly tested out, but the results thus far are undeniably discouraging.

#### ENGLISH WOOLS FOR AMERICA.

### AN INCREASED BUSINESS AND SOME OF THE CONSIDERATIONS THEREFOR.

Buying for America has been an important feature this year at the English wool fairs, and the opinion is confidently expressed that the complete removal of the American tariff on raw wool will contribute to a permanently increased business. As the "Wool Record," of Bradford, puts it, American and English wools each have their own peculiar sphere, "each being defended as worth more money, actually making more money and being quite as good as if not better for manufacturing purposes than the other." The "Record" adds that, "Personal prejudice apart, there is probably a grain of truth in both views, but seeing that American manufacturers are out to buy more wool, and are ready to take English if they can secure it at a market level, you may reasonably ask what there is about it which attracts them?"—a question which the "Wool Record" proceeds to answer as follows:

That fashion has a lot to do with the matter seems to be quite beyond doubt, for manufacturers have taken our wools because they can be made into fabrics which appeal to the American people in respect of handle. It is not that there is any definite idea that English wools are finer and therefore make a finer cloth. This would be entirely beside the mark, for American wools have nothing to be ashamed of so far as their quality is concerned. Though fine goods have been very popular in this country for some time, it does not follow that they are popular everywhere and will always be so. There is such a thing as cultivating a taste for a certain fabric, and it is not always the wearer who is responsible for the commencement and enlargement of that taste. Put a new attractive cloth on to the market, announce that it is going to be popular, and the trick is done.

Now whether the American wearer has found out for himself that cloth made from English wool has about it a handle which pleases him, or whether he has been taught, is perhaps difficult to decide, but the fact remains that the handle of English wool goods has given them a fairly safe place in the estimation of the American public.

Another quality of English wools which the "Wool Record" considers as particularly attractive to American purchasers is the constancy of the yield — an important factor. "We have seen Irish wools," says this English writer, "which would give a clean yield of no less than 80 per cent. That is, out of 100 pounds of raw wool, 80 pounds of scoured wool would be got. On the other hand, we have seen heavy, greasy, sandy wools grown in West Australia which would not give any more than a clean yield of 30 per cent, which also means that out of 100 pounds of greasy wool there would be no more than 30 pounds of scoured. American users of English wools have found that their yield is fairly reliable." The "Wool Record" thinks that the temperate climate of England has something to do with this, "for though there is certainly some variation in heat, rain, etc., we do not have such extremes as are found in some other parts of the world, and there is no doubt that a moderately regular average of weather conditions contributes very largely to a corresponding regularity in the condition and other features of the clips

Again, this Bradford writer observes, the English wools are free from the troublesome burrs which so afflict many wools from Australia. The plant producing burrs is quite unknown in the United Kingdom.

#### THE PEOPLE OF LAWRENCE.

## SOME INTERESTING SOCIAL STATISTICS OF THE FEDERAL GOVERNMENT.

Lawrence, Mass., the chief wool manufacturing community in New England and, next after Philadelphia, in the entire country, has been the target of much sociological inquiry and speculation, a great deal of it unjust and some of it ridiculous. To Lawrence there have come with the swift growth of the textile mills very many thousands of "new immigrants" from southern and south-

eastern Europe. It is a polyglot town like many other manufacturing communities, but not so much of a foreign town as current discussion may have led some persons to imagine. According to the definite figures of the Federal census, a majority of the people of Lawrence are native-born.

The total population of Lawrence, according to the last Federal census, was 85,892, of whom 42,858 were males and 43,034 females. Of the total population the native-born whites of native or mixed parentage numbered 44,252 and the foreign-born whites 41,319. The foreign-born of Lawrence represent 14 different nationalities, speaking, however, a larger number of dialects.

There are in all 17,142 families inhabiting 10,413 dwellings—an average of five persons to a family and of 8.2 to a dwelling. This does not indicate overcrowding as a whole—and indeed, except in a very few localities, the housing conditions of Lawrence have withstood the searchlights of many volunteer investigators.

The age of the population, as given by the Federal officials, is as follows:

Under 5 years	9,317
5 to 14 years	14,982
15 to 24 "	17,952
25 to 44 "	29,107
45 to 64 "	11,820
65 and over	2,691
Not accounted for	23
	85,892
6 to 20 years of age	23,560
Over 15 years of age:	
Males 30,836	
Females 30,757	
Over 91 week of any	61,593
Over 21 years of age:	
Males	25,983
Females not re	ported.

The school system of Lawrence has a problem to grapple with, but it is making vigorous headway. Of the total number of 14,063 children in the schools, native-born of native white parentage represent 2,636; native-born of foreign or mixed white parentage 8,628; foreign-born of white parentage 2,772, and negro 27. These statistics again do not present Lawrence as

an altogether strange or foreign city, for 11,264 out of the 14,063 school children are native-born of either native white or foreign or mixed white parentage. The melting pot in Lawrence apparently is in good, active, successful operation.

The foreign-born loom large in the statistics of illiteracy, for of the 9,067 inhabitants of Lawrence ten years of age and over who are classified as illiterate, persons who cannot write, the foreign-born number 8,778; the native-born whites only 214, and the negroes 62, while 13 are not accounted for. For these foreign-born illiterates Lawrence has a system of night schools, well patronized and efficient. There is illiteracy in Lawrence, but it is something for which not Lawrence is responsible but the governments of the nations whence the immigrants have come.

In Lawrence, as elsewhere, the avidity with which the children of illiterate foreign-born parents take hold of their educational opportunities is a subject of constant remark. And equally significant is the eagerness of the young new-comers to acquire a knowledge of the English language. They realize the handicap of ignorance and put all the best there is in them into efforts to overcome it. Many of the mill officials of Lawrence in close touch with working conditions there declare that a good proportion of the younger immigrants, particularly the young girls, have a native deftness which, when the English language is once learned, makes them among the most expert and desirable of operatives.

#### AN AMERICAN REPLY.

NATURALLY the American protective tariff has not been popular in England, and some of our good friends there have spoken of it in language comparable with that indulged in by anti-protectionist newspapers and politicians of the United States. In the "Weekly Wool Chart" of Bradford there appeared lately this tart American reply, written by a "wool importer":

"I should like to make a few comments upon the views of Sir Swire Smith, as published in your issue on the 19th of February.

"He refers to the 'one hundred millions of people who have been compelled by the outrageous tariff to be clothed in highpriced goods of doubtful quality.' You will see from my card enclosed that I know something about wool, and I may add that I know something about cloths, having been a manufacturer of the same; but the views I express below are not only mine, but those of expert American tailors who are willing to buy imported cloth or American cloth, whichever they find cheaper.

"My tailor tells me that the net reduction at the present moment on suits is \$3. This is not 20, 30, or 40 per cent less than a year ago, but is less than 10 per cent reduction. He further tells me that he can to-day buy a better American cloth at \$2.50 per yard than any English cloth offered him at \$3 per yard. This is despite the fact that English cloths coming in now only pay one-half the former duty.

"Further, if you go into the large department stores you will find scarcely any benefit in reduced prices. English stockings made of wool, which sold one year ago at 75 cents (and by the way, you pay 2s. 6d. for the same thing in Bradford, which is only 6d. difference) are quoted and sold to-day at the same price, 75 cents. English hats which sold a year ago at \$3.50 are to-day quoted at the same price, \$3.50. So that the American public is not gaining one cent.

"Further than this, however, you are not sending, and are not going to send, as many of your tops, yarns, or cloths as you imagined. We are going to make a desperate fight even if it costs our profit. Of course, if we have to do it, wages here will be reduced to meet yours.

"As to who is going to gain by the new tariff, it is a big problem. We are paying an income tax now which would have been entirely unnecessary if the old tariff had remained, and the general public is scarcely finding any commodity cheaper than it was a year ago; certainly foodstuffs are as dear, if not dearer.

"One thing we have yet to learn, namely, to make the stuff that is produced in Batley and Dewsbury. Probably we shall learn this."

#### A NOTABLE NEW DEPARTURE.

FRIENDS and customers of the Arlington Mills have received a notification that on August 1 the office of the treasurer will be transferred from 78 Chauncy Street, Boston, to the mills at Lawrence, where all the financial and accounting business of the corporation will hereafter be transacted. After August 1 all purchases of dyestuffs and general supplies which have been made at the Boston office will be made at the mills at Lawrence. But the office of the president will remain at 78 Chauncy Street, Boston, whence all orders for wool, cotton, etc., will be placed, under the direction of the president, as heretofore. It is announced that confusion will be avoided and the business expedited if all correspondence on and after August 1 is addressed in accordance with the notice, which is signed by Franklin W. Hobbs, president, and Albert H. Chamberlain, treasurer.

This action of the Arlington Mills' management has aroused much interest and comment in the textile trade, and the general verdict has been one of unmistakable approval. It is recognized that the step is in accord with the practical, business-like. economical spirit of the present time, and that a closer relation between the treasurer and the mills may result in this, as in other cases, in enhanced efficiency of operation. It is understood that Mr. Chamberlain, the treasurer of the Arlington Mills, will not only have his office in Lawrence but will make his home there, as will the others connected with this office. Such a move will notably lessen the complaint of "absentee" management that was made freely, though not altogether justly, against the great mills of Lawrence in the strike of 1912. The new step is heartily acclaimed by the Lawrence newspapers and people, and it is believed not only in Lawrence but elsewhere that the Arlington Mills in this matter are acting as pioneers in a tendency that may assume broad proportions among the textile establishments of the New England States, whose executive officers in most cases have traditionally been in Boston for reasons that were, perhaps, more potent before the days of the telephone.

#### THE WOOLEN TRADE OF SCOTLAND.

Scoren wool manufacturers have had rather a disappointing year, according to the reports of American Consul Rufus Fleming, of Edinburgh. Their volume of production fell off and they were unable to secure from their customers more than one-third or one-half of the enhanced cost of their fabrics, due to the greatly increased cost of raw wool. Their markets favored Saxonies or goods made from botany wools as against

cheviots; small patterns in mixtures; especially fancy mixtures; fine stripes with a decoration of silk; lighter weights for winter goods, and in tweeds novelty and lightness of coloring. The 53 Scotch woolen mills of the Edinburgh district had an aggregate product estimated at 13,000,000 yards, averaging 56 inches wide and ranging in price at the mills from 45 cents to \$3 a yard. For the manufacture of these 13,000,000 yards of cloth it is estimated that not less than 20,000,000 pounds of clean wool were required. Recent advices from Scotland are that the one bright ray of hope on the horizon there is an increased demand from America consequent on the reduced duties of the new tariff.

# QUARTERLY REPORT OF THE BOSTON WOOL MARKET FOR FEBRUARY, MARCH, APRIL, MAY, 1914, AND MARCH, 1913.

Domestic Wools. (George W. Benedict.)

	1914.			1913.	
	February.	March.	April.	May.	March.
Ohio, Pennsylvania, and West Virginia.					
(WASHED.)					
XX and above	26 @ 26½	$26 \  \   \  \   \   \   \   \                     $	$26\frac{1}{2} \ \widehat{a} \ 27$	27 g 28	31 @ 32
X	24 <u>g</u> 25 29 <u>ā</u> 30	24 & 25	$24\frac{1}{2} \ \underline{a} \ 26$	25 @ 261	28 @ 29
1 Blood	29 <u>ā</u> 30 29 <u>â</u> 30	29 @ 30 29 @ 30	30 @ 31 30 @ 31	31 @ 32 31 @ 32	35 <u>a</u> 36 35 <u>a</u> 36
å "·	28 @ 29	28 a 29	29 & 30	30 @ 31	35 g 36
Fine Delaine	27 @ 271	$27\frac{1}{2} \overset{.}{@} 28$	$27\frac{1}{2} \hat{a} 28$	28 @ 29	31 <u>a</u> 3
(UNWASHED.)	21 @ 211	21 @ 22	22 @ 221	221 @ 23	22 @ 23
Fine	221 a 231	$23 \hat{a} + 24$	$\frac{24}{6}$ $\frac{6}{24\frac{1}{2}}$	25 8 26	28 @ 29
	221 a 231	$23 \ \bar{a} \ 24$	$24 @ 24\frac{1}{2}$	25 @ 26	29 ā 30
i	22 g 23	22± g 23	$23\frac{1}{2} \hat{a} 24$	25 @ 251	29 <u>a</u> 30
Fine Delaine	23 @ 231	$23 \hat{a} 23\frac{1}{2}$	23 â 24	24 @ 25	25 @ 26
MICH., WIS., N.Y., ETC. (WASHED.)					
Fine					
Blood	28 @ 29	28 @ 29 28 @ 29	29 â 30	30 3 31	34 @ 3
	28 <u>a</u> 29 27 <u>a</u> 28	28 @ 29 27 @ 28	29 <u>a</u> 30 28 <u>a</u> 29	30 <u>ĝ</u> 31 29 <u>ĝ</u> 30	34 <u>@</u> 3:
Fine Delaine	25 8 26	25 g 26	26 @ 27	27 @ 28	30 <u>@</u> 3
(UNWASHED.)	_	_	-		
Fine	19 <u>@</u> 20 21 <u>@</u> 22½	20 <b>@</b> 21 22 <b>@</b> 23	21 @ 211	211 @ 22	21 & 2
1 Blood	21 @ 221	22 @ 23	23 @ 24 23 @ 23½	25 <u>a</u> 26½	27 @ 21 28 @ 2
* · · · · · · · · · · · · · · · · · · ·	21 @ 22	$22 \ \widehat{a} \ 22\frac{1}{2}$	$22\frac{1}{2}\hat{a}$ 23	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	28 a 29
Fine Delaine	$22 \ \hat{g} \ 22\frac{1}{2}$	22 @ 23	22 a 23	23 @ 24	23 @ 2
KENTUCKY AND INDIANA. (UNWASHED.)					
§ Blood	23 @ 24	23 @ 24	24 @ 25	26 a 27	30 @ 3
1 "	23 @ 231	$23 \hat{a} 23\frac{1}{5}$	$24 \hat{a} 24\frac{1}{2}$	26 @ 261	30 a 3
Braid	20 @ 21	20 @ 21	20 @ 21	21 @ 22	26 @ 2
MISSOURI, IOWA, AND ILL. (UNWASHED.)					
§ Blood	22 @ 221	$22 @ 22\frac{1}{2}$	221 @ 23	25 @ 251	28 â 29
1 "	22 @ 221	$22 \ \hat{a} \ 22\frac{1}{2}$	221 2 23	25 @ 251	28 @ 29
Braid	20 @ 21	20 @ 21	20 a 21	21 @ 22	25 @ 20
TEXAS. (SCOURED BASIS.)					
12 months, fine, and fine					
medium	51 @ 52	53 <b>g</b> 54	55 @ 56	58 @ 60	58 @ 60
6 to 8 months, fine	46 @ 47	47 @ 48	48 @ 50 48 @ 50	53 @ 55	52 & 55 52 & 5
12 months, medium 6 to 8 months, medium .	46 @ 47 40 @ 41	47 @ 48 41 @ 42	48 @ 50 42 @ 43	50 @ 52 44 g 45	45 @ 40
Fall, fine and fine med.	42 @ 43	43 <u>a</u> 44	44 @ 45	46 @ 48	46 a 4
" medium	38 <u>@</u> 40	39 @ 40	40 @ 41	42 @ 43	42 @ 4
CALIFORNIA. (SCOURED BASIS.)					
Free, 12 months	46 @ 48	47 g 49	49 @ 50	52 @ 54	50 g 5
" 6 to 8 months	44 @ 45	45 @ 46	45 g 46	46 @ 48	45 @ 40
Fall, free	42 @ 43	43 @ 44	43 @ 44	45 â 47	44 @ 45
" defective	35 @ 38	36 <b>@</b> 39	36 <b>g</b> 39	37 @ 40	36 @ 39
tana. Wyoming, Utah.					
Idaho, Oregon, etc.					
(SCOURED BASIS.)	55 6 50	50 G 57	10 0 10	50 -0 00	50 @ A
Staple, fine and fine med. "medium	55 @ 56 47 @ 48	56 @ 57 48 @ 50	58 @ 59 50 @ 52	59 @ 60 52 @ 54	58 @ 60 55 @ 5
Clothing, fine and fine	1. G 10	9		02 U 01	00 <u>u</u> 0
medium	46 @ 48	48 @ 50	52 @ 53	54 @ 55	53 @ 5
Clothing, medium	42 a 44	43 @ 45	45 @ 47	47 @ 49	50 @ 5
New Mexico, (Spring.) (scoured basis.)					
No. 1 · · · · · · ·	48 @ 49	49 @ 50	52 @ 53	55 @ 56	51 g 55
No. 2	42 <u>a</u> 43	43 @ 44	45 @ 46	47 @ 48	46 @ 4
No.3	37 @ 38 34 @ 35	38 @ 40 35 @ 37	40 @ 42 39 @ 40	42 @ 43	42 @ 43 38 @ 40
No. 4	34 @ 35	35 @ 37	39 @ 40	40 @ 41	00 U 40
Unwashed	21 @ 22	21 @ 22	22 @ 23	23 @ 24	27 @ 28
	J	J	J	-	-

#### DOMESTIC WOOL.

MAY 30, 1914.

The four months under review (February, March, April, and May) have been marked by greater activity in the wool market than has been experienced for a long period.

Contrary to the expectation of most manufacturers, the heavy weight season proved to be a satisfactory one and was not seriously affected by foreign competition, as anticipated it might be. The placing of large orders of goods obliged manufacturers (most of whom were low in stock) to cover with wool, resulting in an active market through the winter and early spring which was accompanied by a substantial rise in values.

Contracting in the West was engaged in most extensively and a spirit of speculation pervaded the trade. Judging from the early wools now arriving, the clip will be in excellent condition, which of course is in favor of those houses which contracted on the sheep's back.

Later quotations on domestic fine fleeces and staple territory are somewhat nominal as the stock of these grades was practically exhausted early in the spring.

With the wool markets of the world now open to our manufacturers, values of domestic wools will be governed by foreign fluctuations more than in the past.

GEORGE W. BENEDICT.

#### PULLED WOOLS. (Scoured basis.) (W. A. BLANCHARD.)

		1913.			
	Feb.	March.	April.	May.	March.
Extra, and Fine A A Super B Super C Super Fine Combing Medium Combing Low Combing	52 @ 56 47 @ 49 39 @ 42 35 @ 37 48 @ 50 43 @ 45 38 @ 40	53 @ 57 48 @ 50 40 @ 43 35 @ 37 48 @ 50 43 @ 45 38 @ 40	54 @ 58 49 @ 52 42 @ 44 35 @ 38 48 @ 52 44 @ 47 40 @ 42	55 @ 60 50 @ 53 43 @ 45 35 @ 40 52 @ 55 45 @ 48 40 @ 43	55 @ 58 48 @ 52 45 @ 48 37 @ 40 55 @ 57 51 @ 53 47 @ 49

#### Remarks.

May 30, 1914.

Pulled wools occupied a strong position throughout the four months. February transactions were comparatively light; but pullers held firm and, in March, obtained their prices. April showed a steady business, and May a general cleaning up of stocks at advanced figures.

Owing to the scarcity of clipped wool, pulled wools of sufficient staple were taken freely by the worsted mills. The woolen manufacturers, less actively employed, bought only for immediate wants. The finer grades, AA's and

extras, were in strong demand, and choice brushed wools of standard pullings were sold as high as 62 cents, — fully 10 per cent more than the same grade brought in May, 1913.

W. A. BLANCHARD.

FOREIGN WOOLS. (MAUGER & AVERY.)

			1914.				1913.			
	Feb	ruary.	M	arch.	A	pril.	N	lay.	Ма	ırch.
ustralian Combing:										
Choice	36	@ 37	36	@ 37	36	@ 37	36	@ 37	41	@ 4
Good	35	ā 36	35	a 36	35	ã 36		@ 36	39	a 4
Average	32	a 34	33	a 34	33	ã 34	33	@ 34	36	ã 3
ustralian Clothing:		<u> </u>		<b>O</b>	1	3		•		
Cholce	35	@ 37	34	â 36	34	@ 37	34	@ 37	41	a 4
Good	34	â 36	33	â 35	33	ā 34	33	@ 34	40	@ 4
Average	33	a 34	33	ā, 34	32	â 34	32	@ 34	38	a 3
ydney and Queensland:		50.	00	3	02	3	-	9	0.0	3 -
Good Clothing	36	@ 37	35	@ 36	35	£ 36	35	@ 36	42	$\widehat{a}$ 4
Good Combing	33	ā 34	33	ā 34	33	ā 34	33	@ 34	40	a 4
ustralian Crossbred:	00	9 .	- 00	3	"	3	00			3 -
Choice	34	@ 36	34	a 35	34	@ 35	34	@ 35	40	@ 4
Average	28	á 30	28	a 30	28	ā 30	28	@ 30	35	a 3
ustralian Lambs:	-	9 00		9 00	-	9 00		9 00	•	9 0
Choice	35	@ 37	35	@ 37	35	@ 37	35	@ 36	42	@ 4
Good	34	â 35	34	@ 35	34	a 35	34	@ 35	39	a, 4
Good Defective	32	a 33	32	â 33	32	â 33	32	@ 33	37	@ 3
ape of Good Hope:	02	6 00	02	9 00	0.0	3 00	02	6 00	0.	
Choice	28	ā 31	28	a 31	28	@ 31	29	@ 31	34	@ 3
Average	26	a 28	26	@ 28	25	a 28		@ 28	30	a 3
ontevideo:	20	<b>9</b> 20	-50	<b>3</b> 20	-0	<b>6</b> 20			00	9
Choice	29	@ 31	29	@ 31	29	a 31	30	@ 31	36	@ 3
Average	27	a 29	27	ā 29	27	a 29	28	a 29	33	@ 3
Crossbred, Choice	28	@ 30	28	ā 30	27	ā 29	27	@ 28	36	ā 3
nglish Wools:	20	G 00	20	<u>u</u> 00		<u>u</u>	"'	<b>G</b> 20	00	9
Sussex Fleece	31	@ 32	31	@ 32	31	@ 32	31	@ 32	42	@ 4
Shropshire Hogs	31	a 32	31	a 32	31	@ 32	31	@ 32	41	a i
Yorkshire Hogs	29	@ 31	29	â 31	28	@ 30	28	@ 30	37	@ 3
Irish Selected Fleece	30	@ 31	30	@ 31	30	@ 31	30	@ 31	39	a 4
arpet Wools:	30	g 51	30	6 01	00	. J.	30	J1	100	· ·
Scotch Highland, White .	19	@ 20	18	a 19	18	£ 19	18	<b>@</b> 19	23	@ 2
East India, 1st White Joria	29	â 31	29	â 31	29	â 31	29	@ 30	32	a 3
East India, White Kanda-	20	6 01	-5	9 01	100	g 51	20	50	02	3
har	23	@ 25	24	@ 25	24	@ 25	24	@ 25	28	$\hat{a}$ 3
Donskoi, Washed, White	24	â 26	24	â 26	24	@ 26	24	@ 26	34	@ 3
Aleppo, White	25		25	â 26	26	@ 27	26		34	a 3
China Ball, White	20	@ 22	20	a 22	20	@ 22	20	@ 22	26	@ 2
" No. 1, Open	18	@ 21	18	@ 21	18	@ 21	18	@ 21	24	a 2
" No. 2, Open	15	a 16	15	@ 16	15	â 16	15	a 16	19	$\hat{a}$

#### FOREIGN WOOLS.

JUNE 10, 1914.

A continued slaughter of American sheep during the year 1913 resulted in depleted stocks at the close of the year. Following the reduction in duties on foreign goods on January 1st, the months of February, March, April, and May were a most interesting period in the market for foreign wools, as it was during this period that the shortness of supplies of domestic wool became startlingly apparent.

The earlier purchases of foreign wools were first of crossbreds and later the demand extended to the finer qualities. New arrivals of both South American and Australian were absorbed as soon as landed and this demand continued without any let up.

Importers were glad to sell on close margins, in consequence of which prices continued remarkably even in the face of the strong demand. Repeat orders were sent abroad and a movement in almost every description of wool, which promises to be of unusual magnitude, has been started to this country.

Besides the raw material, foreign tops, yarns and manufactures of woolens and worsteds have been imported in steadily increasing volume.

MAUGER & AVERY.

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#### BULLETIN

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# National Association of Mool Manufacturers

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[No. IV.

#### AN AMERICAN DYESTUFF INDUSTRY.

A VERY PRACTICAL QUESTION RAISED BY THE EUROPEAN WAR.

By Louis Joseph Matos, Chemical Engineer.

The present condition of affairs in the dyestuff consuming industries due to the war in Europe is most unusual. At no time in the history of the textile industry in America has so much uncertainty existed regarding the possibility of securing dye supplies as at present, and as the war continues the situation appears to become somewhat more acute. The partial activities of the dye plants in Germany, and the military control of all means of internal communication point conclusively that supplies of dyes are practically suspended, and any stocks on hand at the several works are likely to remain where they are until the military authorities loosen their grip on commercial transport facilities.

On the other hand, while the war has seriously interrupted German and Austrian textile industries, in consequence of which few dyes are being consumed in those countries, there is every likelihood that, when hostilities cease, the immediate domestic demand for dyes and other mill supplies will be immense, and the Germans will, without doubt, see to it that their own industries will be supplied at the earliest moment in order to forestall as far as possible any foreign country gaining advantages in export trade over their own business, hence the exportation of dyes will be carefully regulated so that the German mills may have every advantage.

While the tie-up of dyes is very complete, and our Ameri-

can mills feel the pinch, it is noteworthy that dyestuff buyers have a much greater respect for dyestuffs than formerly, and it is very likely that the lessons of the war will impress upon our mills that, after all, the dyestuff industry is one of very great importance to them, and without which they cannot well get along.

The shortage of dyes has been the eause of many inquiries made as to the possibility and practicability of manufacturing them in this country from domestic raw materials with a view of putting our textile mills in a position of independence, and which has been the cause, during the past month, of much that has appeared in some daily and other papers in articles and interviews bearing on this subject. Some writers have blandly asserted that the manufacture of dyes in America is quite possible, while others go so far as to claim that their production in this country is quite impossible. careful review of all the governing factors points to the conclusion that neither extreme is correct, for the reason that quite a respectable number of coal-tar dyes have been made here for many years, not from raw material originating in America, but from certain middle products and other partially completed chemical substances that had only to be subjected to the final process in order to be converted into a dye. These middle products and similar substances have been primarily imported from Germany, and constitute an important item of Germany's chemical export trade. These products have not been manufactured in this country for the reason that it has been more convenient to purchase them from chemical works already established than to erect works for the purpose, but it would be erroneous to believe that these products could not be manufactured here.

Considering the prospects of dye manufacturing in this country, attention must be given to several points, each of which is of extreme importance not only for itself, but in its relation to the others, and which bear directly upon the sources and production of initial raw materials, secondary raw materials, middle products, and the processes leading to their final conversion into commercial dyes.

These several considerations mean the economical collection of coal tar, and its transportation to central tar distilleries, and the commercial separation by distillation of the principal constituents; the further conversion of the initial raw materials into secondary raw materials, for example, benzol into aniline, or naphthalene into the naphthols, etc.; the still further conversion of these secondary products into middle products, such as that of the naphthols into the highly important various sulphonic acids and many other allied chemical products, without which the long array of azo and other dyes would be impossible; finally, the actual dye producing process.

To accomplish all this requires the careful selection of localities and the equipment of the several distinct factories, and there would be quite a number necessary if it is contemplated to produce even as few as seventy-five separate dyes. The equipment calls for solution tanks and vats, some of wood, others lead lined; digestors with and without agitators; others constructed of very heavy cast iron, internally and externally heated, and built to resist high pressure; some must be plain, others porcelain enameled; autoclaves for high and low pressure, jacketed and heated; pumps; filter presses and numerous minor items unnecessary to detail here.

The management of each plant, while not a serious matter, demands a knowledge of conditions of this kind of chemical manufacturing that at the outset would be slow to acquire, but which could ultimately be attained. The primary distillation of coal tar is an industry in itself, and each "tar works" to be successful, comprises quite an equipment consisting of tar storage tanks, several tar stills, condensers, receiving tanks for the "fractions," pitch tanks, water installations for cooling, and a steam boiler to supply heat to warm the tar before being fed to the stills. The working-up of the benzols, toluols, xylols, etc., is another industry, as is also the further chemical treatment of these products in the manufacture of benzidine, toluidine, xylidine and their dependent products, which constitute very important basic constituents for a wide series of dyes.

The handling and working-up of phenol or carbolic acid from the earbolic oils is distinctly a separate industry, while the working-up of the naphthalene and anthracene fractions forms sharply defined branches of chemical labor. Consequently, before the manufacture of any group of dyes could be remotely considered, several minor, though absolutely necessary chemical industries must be first provided and their existence and continued operation guaranteed in order that the dependent industries, the industries of the "secondary raw materials," and the "middle products," may also be assured an existence. Few dyers and dye consumers realize this complicated feature of coal tar dye manufacturing: how completely dependent upon one another these minor chemical industries are and how complex their inner workings, and not, as some imagine, being buried under mountains of impenetrable secrecy, the "secrecy" of dye manufacturing being chiefly the child of one's imagination. It is to be wondered at that so few chemists have grasped the magnitude, extent, and importance of the preliminary chemical manufacturing processes leading finally to the commercial dyestuff.

The organization of an average moderate-sized plant for the production and manufacture of these preliminary chemicals is not complicated; as a rule there is a superintendent who is also a practical chemist, an assistant chemist to determine and control the output as to identity and purity, a clerk and weigher, and a foreman to keep the workmen going; these are generally all that is necessary. In the carbolic works the plant runs almost automatically, and it is rarely that anything happens that is out of the ordinary. In making the naphthalene products, the two naphthols, etc., and the sulphonic acids, the work is somewhat more particular, but not especially exacting. In making benzidine, naphthionic acid, phthalic acid, salicylic acid, dianisidine, and a few similar items, the work frequently proceeds for weeks at a time without a hitch.

It has recently been asserted that alizarin cannot be made in this country. Nothing is further from the truth, because this important product is readily made by a practical organic chemist wherever anthracene is to be obtained, and a suitable plant can be put up. The reason why alizarin has not heretofore been made is because it can be purchased abroad ready made, and at a proper price, which made it unnecessary for our tar distillers to run off the anthracene fractions, which, in consequence, are allowed to remain part of the pitch. Anthracene exists in American gas tars and will be separated when the demand is made that it should be. From alizarin a number of other products are quite possible, but it is doubtful whether they could be made here at a profit or even to be sold to mills at the American cost of production in view of the foreign product continuing to be admitted free of duty.

From a strictly technical standpoint, the commercial production of many dyes is possible from domestic raw materials if the latter are separated and made available, as suggested above, or, when hostilities have ceased and conditions become somewhat normal, the secondary and middle products could be freely procured abroad from the numerous smaller works making specialties of them. As England has always been by far the largest producer of coal tar, disposing of its distillation products in excess over and above her own needs to other countries, principally Germany, it is probable that American dye manufacturers could arrange for a source of supply for many such intermediate products in England.

The subject of patents is of importance, and in this connection the loss of the coal tar dye industry from England, where it originated, to Germany, where it has reached its present high state of development, is directly traced by the president of the Society of Chemical Industry in his annual address, published in the journal of the society July 15, 1902. All chemical processes and stages in the manufacture of dyes, including the latter, are patented and fully protected in all industrial countries, but only the United States patents that have expired can be freely worked here. It is well known that the owners of patents remaining in force will not grant licenses to American or other chemical works to

operate them, as according to the German economic principles underlying commercial expansion no goods should be made elsewhere that can be made in Germany.

As to the later dyes, the important series of vat dyes that include the extensive range of fast colors for cotton, those would consequently remain German-made products as long as the patents were in force.

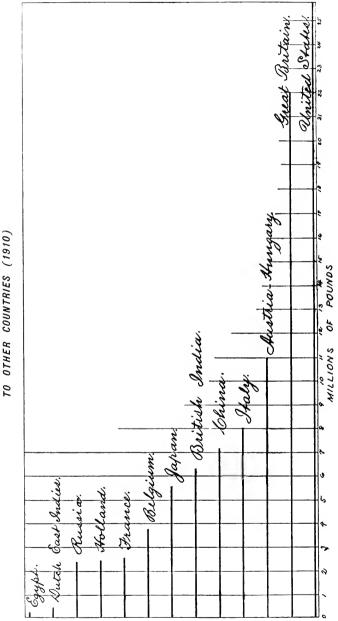
In the matter of expired patents there is a total of nine hundred dyes that have appeared in commerce under various trade names since 1856, the year of Perkin's discovery, and with very few exceptions all have been patented in the United States. Of this entire line, there are now free to operate about six hundred and twenty-five patents, the protection being lifted, due to expiration. Included in this number is probably the largest list of dyes actually in use in many of our woolen and cotton mills, and no doubt a number of them could be manufactured in this country from our raw material, provided we had here the subsidiary chemical works to convert these raw materials into immediately available middle products.

Regarding the economic situation of dye manufacture in this country from domestic raw materials, it is to be very seriously doubted if the artificial colors could be produced at anything like a reasonable cost, on account of the higher rate of wages paid here in comparison to the wages paid to labor in the corresponding chemical works in Germany. very few specific items, all artificial dyes pay a duty of 30 per cent ad valorem, which is not by any means sufficiently high to permit any extensive expansion of the infant coal tar color industry that already exists in this country. If American manufacturers of textiles and other color consuming industries were to get together and pool their purchase of dyes, eliminating those procured in minor quantities, and also those of slight differences in shade, and agree to take the output of an American color industry, then an American dve industry could possibly be put on its feet and probably survive. To such a proposition Congress would have to give its aid by either enacting a law providing for an increase of

duty over the present, or for the retention of the present duty, but providing for an additional specific duty to effect the difference in the cost of making particular groups of dyes, or even the imposition of a prohibitive duty, as is the case in Russia, in which country for that reason the Germans were compelled to erect plants. It is not likely, however, that any such drastic changes would be made. On the other hand, it must not be forgotten that as the Germans have their dye works already equipped and in shape to proceed at once and turn out colors, they could therefore possibly afford to ship certain classes of goods to this country at such costs that it would be almost impossible for American dye manufacturers to compete unless a higher tariff were enacted. has even been suggested by some individuals that certain of the dye exports to this country would be at a cost under that of manufacturing, and then covering such apparent losses by adjusting the costs of other dyes made under live patents so as to compensate for the difference, but this procedure is to be very seriously doubted. There are many dyes now sold in this country at prices that appear high in comparison with apparently corresponding shades, but for which the dyer is very well contented to pay the price asked, for the reason that they afford him the means of securing certain dyehouse results that he can obtain in no other way, fully exemplifying the fact that dyes having special properties and high degrees of fastness always command higher prices.

The magnitude of the dye manufacturing business may be surmised from the annexed diagram made from figures for 1910 (the latest available in this form), which shows the volume of coal tar dyestuffs exported from Germany to various countries.

DIAGRAM SHOWING THE VOLUME OF EXPORTS OF COAL TAR DYESTUFFS FROM GERMANY



Just what the consumption of dyestuffs in Germany amounts to is not known, but it must be considerable.

Imports of coal tar dyestuffs into the United States for the years 1912, 1913, and 1914 are graphically shown in the table following, which is taken from the "Daily Consular and Trade Reports," September 16, 1914.

The imports of artificial dyestuffs into the United States have been stationary for over five years, with a slight decline during the fiscal year ended June 30, 1914. The total average purchases from abroad of alizarin and coal-tar colors have been about \$10,000,000 annually, but there was a drop in the year just closed to \$9,500,000. The imports during the past three fiscal years ended June 30, with the share furnished by Germany, have been as follows:

	1912.		1913.		1914.	
Alizarin and alizarin colors:	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
From Germany	5,373,087	\$1,359,560	7,976,457	\$1,797,086	2,593,758	\$833,70
From all other countries	75,662	22,376	60,135	20,184	39,656	11,75
Aniline salts:						
From Germany	4,252,143	337,005	4,545,798	337,832	2,768,191	202,72
From all other countries	548,276	45,671	418,569	32,461	316,276	20,000
Indigo:1						
From Germany	7,032,023	965,047	7,212,451	974,502	7,448,412	938,09
From all other countries	626,044	188,095	500,057	128,395	676,799	155,129
Coal tar colors, all other:	,	,		•	,	
From Germany	1	5,757,052	1	5,766,600		5,965,53
From all other countries		1,208,069		1,338,684		1,275,869
Total values:						
From Germany		\$8,418,664		\$8,876,020	. <b></b>	\$7,940,06
From all other countries		1,464,211		1,519,724		1,462,758

<sup>&</sup>lt;sup>1</sup>The statistics for indigo include imports of natural indigo from India, which average less than \$100,000 worth annually.

The textile and other industries in the United States have been steadily increasing their consumption of synthetic dyestuffs, but the large increase has been supplied from the new and enlarged chemical works in the United States, the value of whose output was \$7,350,748 in 1899, \$10,912,224 in 1904, and \$16,428,676 in 1909. This ratio of progress indicates that the American chemical industry is responding to the expanding domestic demands for synthetic colors. Adding the imports to the domestic production there was apparently a consumption in the United States in 1909 of over \$25,000,000 worth of these articles.

That dye manufacturing in Germany is profitable to the stockholders of the several companies cannot be doubted, although all the dye works do not return the rate of dividends. It is a matter of public record that one company has paid as high as 36 per cent; another 33 per cent; another 22 per cent, while other companies paid dividends as low as 10 per cent. Of course, in some of the works, and one in particular, there is a most important department given over to the production of commercially valuable lines of both photographic and medicinal chemicals, while others benefit directly from the sale of certain waste materials that serve as raw materials for other chemical industries.

The utilization of waste in a color works reaches very high efficiency, and every effort is made to find a process or method whereby the apparently useless by-products of one operation may serve as a raw material for another operation. If this cannot be done economically, an outlet outside of the works is sought and if possible new uses found for otherwise useless substances. This is well illustrated in the utilization of chrome alum, a refined waste product from the alizarin process.

Regarding the problem of manufacturing dyes in America from domestic raw materials, we have an enormous supply of coal tar that might be made available if such transportation rates existed as would permit the establishment of centrally located tar distilleries that could be operated at a profit. The amount of coal tar produced in the United States in 1912 totaled about 645,000 tons of 2,000 pounds each, and if three-fourths of this amount, say, 480,000 tons, could be collected and distilled into its several main fractions, there might be recovered and made available for the manufacture of dyes, the following quantities of crude products:

8,000 tons . . . Light Oils. 51,000 . . . Middle Oils. 40,000 . . . . Heavy Oils. 68,000 . . . . Anthracene Oils. By further treatment, each of these four products could be worked up and made to yield the following quantities of secondary raw materials, viz.:

5,000 tons . . . Benzol, available for aniline, etc. 25,000 " . . . Naphthalene. 20.000 " . . . Anthracene, corresponding to about 24,000 tons of dry alizarin.

From the foregoing it will be seen that IF all the by-products from our tars are recovered and worked up, American mills could be supplied with a very fair proportion of the dyes that they consume.

There are also some chemicals employed in the manufacture of dyes that are used in very large quantities, such as caustic soda, ammonia, sulphuric acid of various strengths, including fuming sulphuric acid, chromic acid, and other chemicals that find but a limited application in chemical industries outside of dye manufacture, to supply which will require that the closest coöperation would have to exist between the already operated acid plants and other chemical works and the dye plants, so that the latter should not be handicapped by shortages of necessary chemicals. As soon as a prospective domestic market is promised, existing American chemical works or new establishments will meet the situation.

A most important point that confronts the prospective dye manufacturer, however, is the supply of proper apparatus to mechanically control the chemical reactions on a large scale, which our foundrymen have not been called upon to manufacture. Even when supplied with correct working drawings of the individual pieces of apparatus, they hesitate, and perhaps rightfully, to undertake the work and guarantee results. If cooperation between the dye manufacturers, foundrymen, and machinists existed, it is possible that the two latter would meet every demand, but cooperation of the desired character costs money. In Germany the manufacture of chemical and dye making machinery and appliances has

developed into a most specialized branch of business, and has grown to meet the demands of the practical chemists and chemical engineers in charge of, and responsible for, making the dyes, and not the research chemists who are the real dye discoverers, the majority of whom, however, are not able to recognize their own dyes when being practically made in the works.

Dve making is so thoroughly complicated that it is the rare exception to find a man who has made a dve commercially from start to finish, that is, who is able to supervise all the manufacturing operations from the initial raw material, and carry them through to the end. As a fact, the aniline chemist's work ends with the delivery of methyl aniline from benzol, and he has nothing to do with the production of benzol, which is delivered to his plant. The same with naphthalene, the manufacture of alpha- and beta- naphtol stands alone, while the manufacture of a few of the various naphthalene, naphtol, and naphthylamine sulphonic and di-sulphonic acids constitutes a very exclusive branch of the business, the chemist-overseers of which have all that they can attend to without going any further. These several subordinate industries must be established before the real work of dye making begins.

The administration work of dye making proper is extensive, and largely technical. The supplies of chemicals and raw materials must be tested for identity, strength, and purity. The dyes as delivered by the dye maker must be tested for strength, for it must be remembered that hardly two batches of the same dye are of exactly the same strength, but they must be "brought to standard" before they are delivered to the commercial department.

Therefore the prospects of making dyes in America from domestic raw materials is not as rosy as it at first appears, and the recently published frantic appeals to manufacturers to rally to the inauguration and support of an extension of the American dyestuff industry appears to be somewhat in the light of misdirected energy.

That coal tar dyes will ultimately be made here in greater

quantities than at present, no one doubts, and it is very safe to conjecture that the present war will be the prime cause prompting American capitalists and large dye consumers to investigate the possibilities from every angle, but it is extremely doubtful if commercial results will obtain before hostilities cease, even should they continue for two years.

The proposition to inject into the patent law a clause providing for the working of all United States patents within a limited time after the date of issue under penalty of forfeiture might work advantageously. If such a provision were made and enforced and American raw materials brought to light and availed of, as they would then be without doubt, the fallacy of the statements made to the committee on patents some time ago would be found to have been largely errors, particularly when it was stated that no raw materials were to be obtained in this country. Of course no one believes that the German dyestuff industry could be transplanted to this country and made to survive on the raw material to be obtained here, any more than it could survive in its own country if England, as a source of immense quantities of tar, prohibited its excess tar products being exported.

# CLOTH TESTING FOR THE ANALYSIS OF FAULTS.

#### By Howard Priestman.

BEFORE beginning the study of any subject, it is a good thing to get a clear idea of the meaning of the words in which it is usually described. When such words are correctly used they go far towards explaining the object which is in view. In speaking of our present subject we have, therefore, at the outset to determine what is meant by the words "to test." In general use they are nearly always taken to refer to the strength or endurance of some person or thing.

This is, of course, entirely in keeping with the dictionary meaning of the words, but in the textile trade, testing has fortunately a wider application. It is there used to signify examination into many qualities. The meaning stands in exactly the same relation to the word analysis as is the case in chemistry. A single chemical analysis is the outcome of a series of tests. They may be simple or they may be complex. They may consist of only one or two or they may be very numerous. Exactly the same thing is true of textile analysis, which in its most complex form is the analysis of textile faults. Although the word is not well known to the public, textile analysis is an accomplished fact (or an existing art) and textile testing is as subordinate to analysis as it is in the case of science.

It is true that textile manufacture is an art and not a science and that the laws which govern textile analysis are not, therefore, accurate in the scientific meaning of the word. But it is no less true that certain facts and factors will give wonderfully certain results, and that analysis which is worthy of the name can be and is carried out.

In complete textile analysis, such as might be required in the settlement of some case at law, it might be necessary to test for one or all of the following data:

- 1. The amount of moisture present in the wool.
- 2. The amount of oil and insolubles present.
- 3. The average length of the fibers of which the yarn is composed.
- 4. The quality or diameter of these fibers.
- 5. The size of the single yarns into which they are grouped.
- 6. The number of yarns in one strand.
- 7. The number and direction of turns in the single.
- 8. The number and direction of turns in the folding.
- 9. The number of bobbins used for warping.
- 10. The tension applied in the warping.
- 11. The take up in the warp in weaving.
- 12. The take up in the weft in weaving.
- 13. The sett and picks in the loom.
- 14. Weight of the woven cloth.
- 15. A number of questions in regard to dyeing, too numerous and varied to state in detail.

It is, of course, unlikely that tests to decide on all these points will be required in any particular case, but it is none the less a fact that any one who sets about the analysis of a textile fabric must bear every one of them in mind, and must not be surprised that his efforts to analyze a fault are futile if any one of them is left out of consideration.

The analogy with the term as used in chemistry is in fact very close. A chemist must know exactly what test to apply in order to obtain correct analyses, and he must also be aware that the wrong reading of a single experiment will lead to incorrect deductions. The same thing is fully true of textile analysis. If one has, for example, to consider the single question of shrinkage, it is necessary to decide on almost every one of the points enumerated before finally concluding as to what is the real cause that makes some particular piece narrower or wider than it ought to be.

But over and above all other data, there is the question of strength to be considered. Strength will depend on some of the factors already tabulated, and strength testing is, therefore, one of the most useful means for indicating the line to be pursued in looking for the cause of some particular fault. It is, therefore, to be regarded as a means to an end rather than as an end in itself, and it is well that every investigator should bear this in mind. It is but another indication of the fact that clear thinking is far more necessary to successful analysis than is the possession of expensive apparatus. Take the simple instance of a balance, for example. It is wholly unnecessary to have a balance that will weigh to the fourth or even the third decimal of a milligram. The second decimal figure of a grain gives quite sufficient accuracy for the textile trade, for variations of 1 per cent are seldom of any account in either yarns or fabries, and the quantities available for weighing are always relatively large.

It is also a well established fact that the weights of extremely short pieces of yarn are misleading in a high degree. For instance, a single inch of varn may easily differ from its next-door neighbor in a piece by over 50 per cent. In such a case, not the slightest harm will accrue; but if the same difference is continued for a yard, it is highly probable that a very serious fault must exist in the thread. The reason for this seeming paradox is very simple, when it is understood. All varns are more or less irregular. They contain thin and thick places. For places of an inch or two in length it may happen that the drafting of the roving has caused a place in the varn which is 33 per cent thinner than the bulk. In another the irregularity may be just as certainly 33 per cent too thick. Where two such places are contiguous in the cloth, it is quite clear that one will be double the size of the other, continuing for a very short length. Then will come a space in which both yarns are alike, but before a distance of two feet has been examined it is highly probable that the thick varn will have become thin and the thin one thick; that is to say, in a whole yard the weight of adjacent threads will be very nearly alike.

On the other hand, if anything has caused yarn to be 50 per cent smaller than its neighbor for a distance of a yard or more, it is quite clear that some very serious accident has

taken place in the machine that made it, and it is probable that both the counts and the twist will differ entirely from those of the thread by its side. These two factors would of themselves make it certain that the shrinkage of such threads would be dissimilar, and they would, therefore, set up a fault which would certainly be of a serious nature.

To obtain the relative counts of the yarn in two pieces of fabric, it is, therefore, by far the safest way to stamp out a square inch of cloth and separate the weft from the warp. This will certainly give 60 or more threads of warp that have been made from 60 different bobbins and the average weight will be consequently accurate. It is true that the 60 picks of weft may be all from the same bobbin, but they will be taken at intervals that will allow of the most accurate average, and the practice is therefore one of the best. This has carried us rather far from the question of the instruments that are needed, but it has at least shown that the balance that is required for weighing will seldom have to deal with less than one-quarter of a grain.

It is astonishing how few instruments are needed for the other types of testing that have been mentioned above. An oven with a delicate balance is all that is needed for numbers 1 and 2. To obtain the average length of fibers is a question of very delicate handicraft and nothing more. quantity of fibers be sufficient, the estimation of their size or quality is most accurately done by unaided eyesight alone, but when the quantities are very small a microscope with micrometer eve piece is certainly a very useful means of literally measuring their diameters. To obtain the number and direction of turns in the single, a simple and inexpensive machine is needed, but one that is slightly more complicated and a little more expensive will clear up the questions that are raised under heads 5, 6, and 8. No instrument that is yet invented will find the number of bobbins used in warping, or the tension thereby applied, nor will it give the take up of warp and weft in weaving. These things, if they are to be obtained at all, must be obtained by painstaking measurement under tension. Finally, to obtain the sett of the picks

of a cloth in the loom, a square inch of the finished material must be stamped with a cutting dye. It must be separated into its constituent threads and after these have been weighed the necessary deductions and calculations must be made.

Apart from the irregularity in the color of cloths, or in the color of certain strands in the fabric, the strength that has been lost by the material in dyeing is one of the most common with which we have to deal under head 15. For this purpose an instrument for testing strength of single strands of varn may be regarded as indispensable, and the much better known machine which is made in Manchester for testing the strength of strips of fabric may at times be an absolute necessity.

Before any one is fit to deal with the instruments themselves or to direct the manner in which they are used, it is expedient that he should understand some of the principles that underlie the clearing up of difficulties. for example, important to remember that there is no more absolute accuracy in the production of a given count than there is in the production of a perfectly uniform thread. has already been stated that a variation of one per cent ought never to be the cause of a fault of any kind. Cloths must be constructed in such a way that so slight a variation will not cause a defect. The usual means of testing the counts of varn is clear proof that this fact is recognized in the trade. No spinner or manufacturer ever deals with single spools in estimating their counts. His reel is made in such a way that he may wind a given length of yarn from seven different spools and weigh them altogether. It is stating the case very mildly to say that seven individual spools spun by a first-class firm would vary from one another by more than one per cent. As a matter of fact the user has to be content if the average weight of seven threads comes within that percentage.

In dealing with faults it is, therefore, clear that errors of one per cent need hardly be taken into consideration. fact, it is the writer's invariable custom to report yarns with such variation as being exceedingly well spun. This brings

us to the point to which it is necessary to call the reader's attention. As accurate standardization is practically impossible, it is essential that all faulty places should be examined, not in comparison with their theoretical counts and twist. but as they compare with apparently perfect varns lying on either side of them. Take, for example, the simplest fault that can occur, in which a bar of obviously different nature extends across a piece. A bar of this description might be made by the dyer, by the weaver or by the spinner. The dyer's fault is very often caused in pressing, and will run across the piece, but it is a well-known fact that in the dyeing there is always sufficient stretching and pulling to make the weft lie in a diagonal or slightly bowed direction. It is therefore safest at the outset to put a series of pins along the mark, placing them if possible on the very pick where the change in appearance takes place. If the piece is then cut at the place where one pin is inserted at the edge, and is torn weft way across the piece, every pin should be loosened or fall out, because the tear will exactly follow a certain strand of weft. If it does not follow the tear, but diverges materially from it, the fault cannot possibly be attributed either to the weft or to the loom which put it in. It may be said with almost equal certainty that when the edge of the fault is so clear that the pins are all within a pick or two of the same thread, the fault is due to the spinner. It is true that the weaving fault would follow a line exactly parallel with any given pick, but the only defect of this character which could be caused by the loom would be an alteration in the number of picks per inch that the loom was putting in. Such an alteration can hardly ever take place with sufficient suddenness to make very definite lines. The alteration from 60 picks to 65 per inch might occupy a quarter of an inch, and though such variation is quite sufficient to cause a definite bar it is one that should be easily detected by the weaver himself, although neither limit would be sharply defined.

When the piece has once been torn along the line of fault, an exact comparison must be made between the cloth on either side. As already pointed out, by far the simplest means of doing this is to use a cutting dye and stamp out one square inch from perfect cloth and one from that which is faulty. A complete analysis of these two single inches will then show many things. First, there are the total weights to be considered. If one differs from the other by 10 per cent, either the picks may differ from one another in thickness by 18–20 per cent, or the number of picks inserted may differ by the same amount. This can, of course, be easily ascertained by counting the warp and weft and weighing each by itself.

An illustration may be taken in which a piece of Sicilian cloth contained a lot of single bobbins, which caused very serious cockled places across the whole width of the piece. In this case the only test which proved to be necessary was the analysis of two square inches. The figures are given below:

Bulk or crimpy portion:

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\begin{array}{lll} 1 \ {\rm sq.\ in.} & = 1.35 \ {\rm grs.} \\ 44 \ {\rm warp} & = .27 \ {\rm gr.} & 1 \ {\rm yd.} = .221 \ {\rm gr.} = 2/75 \ {\rm yarn.} \\ 43\frac{1}{2} \ {\rm weft} & = 1.07 \ {\rm grs.} & 1 \ {\rm yd.} = .88\frac{1}{2} \ {\rm gr.} = 1/14.1 \ {\rm yarn.} \end{array}
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Bar:

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1 \text{ sq. in.} = 1.49 \text{ grs.}

44 \text{ warp} = .27 \text{ gr.} 1 \text{ yd.} = .221 \text{ gr.} = 2/75 \text{ yarn.}

41\frac{1}{2} \text{ weft} = 1.21 \text{ grs.} 1 \text{ yd.} = .105 \text{ gr.} = 1/11.9 \text{ yarn.}
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In both cases, as might be expected, the number of threads of warp were not only exactly alike, but weighed exactly the same amount, 44 of them weighing .27 grain. From this it is simple to deduce the fact that 36 inches would weigh .221 grain and that the counts would be 2.75 cotton. Before discussing the figures regarding the weft, it is well to notice the fact that the faulty places are not because of faulty yarn, but because the faulty yarn has shrunk more than that which is perfect and has caused the latter to cockle or to crimp. The crimpy yarn is, therefore, the perfect yarn, and the square inch from this portion is shown to contain  $43\frac{1}{2}$ 

threads of weft, weighing 1.07 grains. The inch from the bar which appears to be perfect but which has nevertheless caused the shrinkage contains  $41\frac{1}{2}$  picks weighing 1.21 grains. By simple proportion we may deduce the fact that the counts of weft in the bulk of the piece are 1/14.1, whereas those in the bar are 1/11.9. These figures differ from one another by 18½ per cent. It may be contended that there is a weaving fault, because the bar contains two picks less than the bulk, but it is very easy to see that 43 picks of thick yarn could not be crammed into a space which is occupied by 43 picks of a much smaller count. It is perfectly clear that a mix has by some means taken place. Some varn of 1/12 counts has been mixed into a skep of 1/14. It is not a fault of the loom, it is a fault in the material supplied to the weaver, and the cause of the shrinkage can be deduced without difficulty. Thick yarns should always be spun with less turns per inch than thin; less even in proportion to their relative size, and thick counts should, therefore, shrink less if the quality of the two were alike.

It does not, however, follow that every lot of single 12's that a spinner makes contains the standard proportion of turns. Some manufacturers require their yarn to be harder twisted than do others. This may be due to the fad of a particular manager, or it may be due to the peculiar need of It may, therefore, follow that a spinner will some trade. produce single 12's on one frame with 5 turns, and single 14's on an adjacent frame with only 4½ turns per inch. Now if bobbins coming from these two frames were to be mixed in a piece, the thick yarn would naturally shrink more than the thin. As a matter of fact, this was the real cause of the shrinkage in question. It may appear at first sight that investigation has clearly traced the fault to the spinner. Unfortunately this is not the case. It is quite possible for the manufacturer to order hard twisted 1/12 from one spinner and soft twisted 14's from another. In such a case, it is just as possible for his weft boys to mix the yarn from these two skeps as it would be for the same accident to occur in the room of a spinner. There are in fact only two ways

in which the question can be decided finally. If the spinner finds some spools with another spinner's name or mark when the empty ones are returned to him by the weaver, when they are in his cellar, he may well decline all responsibility for the fault and assert that it was the manufacturer who made the mix. It would be a perfectly justifiable stand to take. If, on the contrary, he can produce no such spools he is almost bound to accept responsibility.

It must be borne in mind that few faults caused by shrinkage are visible in the gray cloth. That is to say, the fabric must have been through the first scouring of the finishing processes before it becomes visible. It naturally happens, therefore, that the manufacturer does not know of the fact until a week or two after the piece is woven. If by any chance the fault should be visible to the taker in, there would be additional opportunity of deciding the matter, for the skep from which the bobbins came would still be standing in the weft room and the bobbins it contained could be sorted without more ado. Such a case has occurred in my experience. The spinner had actually delivered yarn of different counts on similar bobbins in the same skep. They were found and receled and he had to "foot the bill."

How he had done it, he was never really clear. Fourteens were the thickest counts he ever spun. The varn that caused the fault was only 12's. It was 15 per cent too thick. He therefore concluded that some rovings of that proportion heavier than they ought to be had been mixed on the spinning frame. Although the fault in the piece of which we have been speaking was undoubtedly caused by a mixture of two different counts of yarn, it must not be concluded that this is the only possible cause of such defect. Different twist in exactly similar counts would cause dissimilar shrinkage. But cockled bars occur in pieces in which the counts, the twist and the quality are all perfectly normal. If two runs of otherwise similar tops are of different ages, or if they contain different amounts of moisture when they go into the drawing, the odds are very heavy indeed that the yarn which is made from them will shrink by different

amounts. If so and if they be not kept separate in the weft room, they are sure to be mixed when they are sent to the loom. The same fault will then inevitably occur.

But there is another and even simpler way of causing irregular shrinkage. Old varn and new varn will shrink by different amounts. Should a manufacturer order, let us say, a skep of varn from which to make a certain piece in the month of May, he may have one-third of it left in stock when a repeat order for two more pieces of the same cloth is sent to him in June. As the time for delivery is short, he demands new varn from the spinner in the shortest possible time and he gets it "hot from the frame." He sees that the counts, the twist, the quality and also the run are the same in the old skep and the new, and so he mixes the two. leaves one fact out of account. The old yarn and the new are not yet equally set. The one will shrink more than the other and so the same fault will occur again, though no analyst would be able to find any difference to account for the variation.

Such a defect would be the simplest of all cases in which a fault is caused by condition, but all the while it must be remembered that defects arising from the application of moisture are many and very various. It may suffice to deal with one in which the cause was particularly obscure to the spinner.

In this case certain bobbins in a piece were literally crammed with very hard, irregular places which were so marked that they rendered the whole piece unsalable. Testing pick by pick for counts and twist yielded no result whatever. Each thread was of the same counts and the same twist as the one adjacent to it. Examination of the faulty places yielded even worse results, for instead of finding that the hard places were caused by thicker or harder twisted yarn they offered positive proof that each strand was both softer and thinner. That there had been excessive shrinkage was very plain to see, and how this could come about with softer and thinner yarn having no alteration of quality, it was difficult to understand. The unique nature

of the fault was only revealed by careful measurement of the take up in the hard places as compared with those adjacent to them. The normal weft lying in a piece of cloth 250 millimeters in length measured 272 millimeters, but when the hard yarn from the same length of cloth was measured it proved that there were only 252 millimeters. These figures mean that to all intents and purposes the faulty yarn was lying absolutely straight between the warp threads, which had to rise and fall over it. The normal yarn, on the other hand, rose and fell so much that the warp threads were diverted but little from a straight line along the piece. The facts of the case were, of course, simple enough. At certain uniform distances along the faulty threads thin places occurred, for which it was very difficult to account.

It is well known that by absolute mathematical law, twist in either spinning or twisting will automatically run into the thinnest portion of the thread, and it was, therefore, contrary to all theory to find the thin places soft. Logical argument made it absolutely clear that the reduction of size had taken place after the twisting process was complete and some reason for subsequent irregular stretching had, therefore, to be discovered. It was at this juncture that the results of certain previous experiments in regard to moisture became for the first time of use. Many facts have already been stated in the "Bulletin" in regard to the shrinkage or expansion of wool fibers and wool varns, when they are exposed to the action of moisture. It is well known that if a hank is scoured and hung up to dry, the subsequent curling of the fibers would reduce the varn considerably in length. fact is so common and so thoroughly well known that it is often accepted as universal, and few people realize that the very opposite effect may occur. Wet yarn made from wool may in fact be pulled out to considerably greater length than it occupies in its dry condition and if it be allowed to dry whilst so extended it will stay in that position and so remain until it is once more moistened. When it is subjected to the action of water the extended varn will shrink with the energy exactly in proportion to the amount by which it had

stretched. Put into plain terms, the facts are these: 2/40 botany yarn with 9 turns in the folding, in normal condition, will stand a breaking strain of 9 ounces and will extend in length by 7 per cent before it breaks, but if this same yarn be thoroughly moistened it will only be reduced in strength from 9 to  $7\frac{1}{2}$  ounces, but on the other hand its elasticity will be increased in quite an extraordinary way from 7 to 33 per cent.

Even when these facts are observed, it proved to be no light matter to utilize them in clearing up the difficulty. It was not until the spinner admitted to the very unusual practice of re-winding, and at the same time conditioning his weft, that any solution could be suggested. It became necessary to take from the piece pick after pick of weft and notice the length of the regular intervals at which the faults occurred. This length would average 6 or 8 feet and it proved to be the distance that each thread traveled whilst it completed one traverse, across the face of the conditioning roller. At one end of the traverse the thread was rubbing not on damp copper, but on a lap of saturated varn. By this means the thread itself was saturated and at the same time so extended under tension that it became smaller in size with proportionally less twist. It was of course unbroken and no fault was noticed until the whole piece was scoured preparatory to dyeing. The moment that it was moistened, however, the threads which had been extended attempted, and to a certain extent succeeded, in returning to their original length. The shrinkage would be five times as much as that of normal yarn with the result that every bobbin, wound where there was a lap of conditioning roller, was ruined beyond all possibility of repair.

A single additional illustration may be given to show the extreme complexity of the problems that often face the textile analyst. A piece of blue serge was sent recently for inspection in which certain bars were not uniform in color. Each of them was divided into six or eight minor bars extending across the piece. The usual practice was followed of inserting pins at the edge of the fault and tearing the piece

across. This showed conclusively that the fault exactly followed the pick and that it might, therefore, be reasonably attributed to the spinner.

Unluckily, a long consecutive number of tests showed that no difference of either counts, turns or quality existed between the various spools. The faulty bobbin resembled its neighbors and an average of ten tests from a light bar differed in no respect from those in a dark one. What was the next course to pursue? Obviously, there must be a reason for the most clusive fault in a fabric, and there was one thing more to test. The twist of the single strands that composed the two-fold yarn might yet be the reason for the fault.

This is not the place to go into a dissertation concerning the structure of two-fold yarns, but some of the elementary facts are necessary to an understanding of the problem in question. If single strands (each containing 10 turns per inch) are laid side by side prior to twisting, the twist in them is equal in all respects, and its direction is easy to see, each single fiber making 10 corkscrew turns round the imaginary axis of the varn in the space of a single inch. Next it must be remembered that in folding, the spindles run in the opposite direction from that of the spinning spindles and that each turn inserted by a twist frame may not unfairly be described as reducing the amount of twist in the single strands. At any rate, it may be stated with confidence that if two otherwise equal yarns be spun, the one with 12 turns and the other with 10, and if both be subsequently folded with 8 turns, the two resulting yarns will differ from one another very nearly as much as would two other yarns, spun alike but differing in the folding by something like two turns.

This is a fact that has to be borne in mind in every case in which apparent twist differences exist, even though it is impossible to find any variation in the number of turns per inch contained in the folded yarn. It is for this reason that it has been here stated at length, for in the instance we are now discussing a long series of averages only served to prove

that the single twist was just as accurate as the folding twist and counts. In other words, the counts, the quality, the folding, and the single twist appeared to be perfectly right. On the principle that the broader the basis of examination, the larger the number of tests, the greater must be the accuracy of the deductions, the whole thing was clearly brought to what Euclid calls "Reductio ad absurdum." The first attack had miserably failed, or more correctly speaking it had been made clear that the field of the inquiry must be very considerably narrowed if any results of value were to be attained.

More careful examination of the piece itself was needed before a new investigation was begun. This examination in a particularly favorable light revealed the fact that, although the bars were clearly visible at both sides as well as in the middle of the piece, they did not, as the manufacturer stated, continue right across. There were two places where the fault was invisible. The fact was that the folding twist in the places where the fault did not show had spoiled the averages of the tests, or more correctly speaking a series from the part where the fault was strongest was to be compared with another series from the self same picks at a distance of 18 inches away.

This method of testing quickly yielded definite results. It was clear that each pick contained different amounts of twist in different parts, though the variation was only very slight. But what was of more importance was the fact that when a series of tests were taken from a piece 10 inches wide, the whole reason of the fault was laid bare. It was caused by variation in folding twist and by nothing whatever clse. As the twisting bobbin rose and fell on the spindle, the speed of the bobbin was altered by one of two possible causes, and the number of turns in the yarn was altered in exact proportion. If we remember that the amount of yarn paid out by the frame is just about 60 inches, every time that a spool lifter rises and falls, we shall grasp the underlying reason why the fault should show at all. In the construction of this piece it happened that the reed width and the

length of one rise and fall of the lifter were alike within an inch and that, therefore, the hard twisted places coincided with one another with regularity for quite a considerable time. Then they gave place to the yarn with softer twist and the minor bars were produced. There could be no mistake, for the number of turns in the folded yarn rose and fell with the utmost regularity from 7 to 9 per inch. The only question of interest remaining was to find out how the fault had originated. Any spinning manager knows that an old, hard set, slack "band" would cause the fault in pre-tension-pulley days, or that to-day a spindle well oiled at the bottom, but allowed to run dry near the top would produce the same effect. The spinner was allowed to take his choice because there were reasons to suppose that he was behind the times and that he might still be running band-driven frames.

At all events, the problem was solved with both parties satisfied as to the cause. Its interest to the reader can only lie in its complexity as showing that for any analysis the utmost consideration is needed before testing is begun and that it is very seldom indeed that differences of 1 or 2 or even 3 per cent are the cause of serious faults. It is in fact true that a 1 or 2 per cent difference must actually have existed between a long average of tests from the good yarn and from that which was imperfect, but the total difference was certainly not the cause of the fault and would by no means have explained the narrow stripes within each bar.

This last example, therefore, goes to confirm the statement at the beginning of this paper that extremely delicate instruments are of relatively little value to the textile analyst, but that it is of the utmost importance that he should know how to use each instrument that he possesses.

If this is true of weft faults, such as have been here discussed, it is infinitely more so in regard to faults in the warp, which may be dealt with at a later date.

#### THE WAR AND THE WOOLEN MILLS.

# MORE INJURY THAN BENEFIT THUS FAR—BRITISH COMPETITION STILL A FACTOR.

Since August 1, the overshadowing consideration in the wool manufacture, as in many other trades, has been the vast and terrible war in Europe. It came so suddenly that in the months of June and July very few manufacturers dreamed of taking it into serious calculation. The woolen industry of the United States has felt directly and indirectly the farreaching consequences of this greatest of conflicts in all the history of the world, and it searcely need be said that viewing the situation by and large the general result has not been beneficial. Foreign competition may have been reduced, but it has by no means been eliminated, while the general disturbance of the war has interfered with the normal American demand for woolen goods, and there have been serious interruptions of the foreign supplies of raw materials.

Those are mistaken who assumed in the first days of the war that it would prove the equivalent of a protective tariff, or, even more than that, a Chinese wall against importations. In the month of August the system of international exchange broke down, and over-seas communication was partly dislocated. But the succeeding weeks have shown a steady improvement in these particulars, and imports of woolen goods from Great Britain especially have markedly increased. The German woolen mills, of course, are closed, so far as American trade is concerned, and so are most of the woolen mills of France, which were located largely in the northern area swept and devastated by the contending armies.

But it is Great Britain and not Germany or France which is the chief competitor of American wool manufacturing, and British mills are active and British ships are running almost as before the war. It is true, of course, that many of the mills of the United Kingdom are having their production

absorbed by naval and military requirements, for Great Britain is under the necessity of clothing not only her own forces but a large part of the men of her western allies, France and Belgium. However, the shutting off of the German and Austrian market for British woolens has made it more and more necessary for British goods of many varieties to find an outlet into the United States.

So that there is no large slackening of competition from British manufacturers. Bradford's exports of tops, worsted cloths, dress goods, etc., to this country were considerably greater in September than they were in August. Though some of the British Transatlantic liners have been taken off for government use, enough remain to insure a fairly prompt and regular delivery of British manufactured goods on this side of the ocean. This vital feature of British commerce is not being neglected by the British government.

On the other hand, the first two months of the war proved distinctly unfavorable to the general trade and industry of America. There was a lessening in the home demand for nearly all products — a reduction which could not wholly be dismissed as "psychological." The woolen trade felt this, as did other trades, and with British imports substantially holding their own and the domestic demand decreasing, the period was not one of encouragement for American wool manufacturers.

In September a more or less speculative inquiry for heavy woolen fabrics, including blankets and knit goods, for the military service of the allies began to appear in the American market. Some important orders, especially for blankets, were definitely placed, but there was a hesitancy about actual contracts for other goods that proved discouraging. It is probable that more and more of this foreign business will develop, but it must be frankly recognized that it is a temporary and emergency business, and nothing equivalent to the steady year-after-year demands of normal peace-time trade. Inasmuch as only heavy-weight goods for winter campaigning are sought, a large section of the American woolen trade cannot possibly be benefited in any event. But in times like these the mood,

naturally and rightly, is one of gratitude for any new business that will move any part of our machinery.

The British embargo upon wool is discussed in a separate article elsewhere. This is not the only disturbing influence which the war has brought to bear upon the supply of raw materials. War risks have forced an increase in freight rates from South America, Australasia, the Cape of Good Hope, China, India, and Turkey. The wool sales in Australia had to be abandoned, and perhaps most serious of all was the interruption in established international exchanges, so that if wool could be secured it was long difficult to arrange the terms of payment.

There are philosophers who have held that a general European war might be for America a blessing in disguise — but thus far most of the anticipated benefits have certainly been disguised with uncommon effectiveness. Another quarter may bring some change in and improvement of conditions, but at such a time it is impossible to prophesy far into the future. The principal lesson of the great conflict thus far has been an emphasizing of the interdependence of the countries of the world, and of the enormous value of the finely adjusted international relations of trade and industry which time and civilization have insensibly wrought.

Following is a statement of imports of cloths, dress goods, carpets and carpeting, showing the principal countries from which these have come:

COMPARATIVE STATEMENT OF IMPORTS, BY COUNTRIES, OF CLOTHS, DRESS GOODS, CARPETS AND CARPETING FOR ELEVEN MONTHS ENDING AUGUST 31, 1914, WITH THE CORRESPONDING ELEVEN MONTHS OF THE PRECEDING YEAR.

Course of Basens	Clothe.	hя.	Dress Goods.	Goods.	Carpets and Carpeting.	Carpeting.	Total by	Total by Countries.
countries of 154 port.	1916.	1914.	1913.	1914.	1913.	1911.	1913.	1911.
Belgium	\$540,934	\$896,984					\$540,934	\$896,984
France			\$882,741	\$3,024,406			882,741	3,024,406
Germany	1,097,970	2,967,241	602,881	I,436,373			1,700,851	4,403,614
United Kingdom	2,669,393	8,060,312	1,722,200	3,264,517	8467,176	\$562,022	4,858,769	11,886,851
Turkey in Europe					1,136,924	741,542	1,136,924	741,542
A sia					2,290,250	2,487,830	2,290,250	2,487,830
Other countries	517,719	1,654,013	28,976	141,606	471 279	359,131	1,017,967	2,154,750
Total by articles	\$4,826,009	\$13.578,550	\$3,236,798	\$7,866,902	\$4,365,629	\$4,150,525	\$12,428,436	\$25,595,977

As is shown in this tabular statement, more than one-half of our entire imports of cloths and dress goods come from the United Kingdom, and these British goods will continue to be imported. Bradford exports of tops to the United States were severely hit in August, the first month of the war, when they amounted to only \$95,714. But in the following month of September the exports increased to a value of \$266.212. So with the exports of worsted cloths from the Bradford district. They were of a value of \$177,014 in August last, but had advanced to \$241,398 in September. Exports of woolen fabries, on the contrary, fell off from a value of \$115,326 in August to \$68,170 in September, due, doubtless, to the diversion of woolen machinery to military fabries. The exports of dress goods, linings, Italian cloths, etc., from Bradford increased from \$366,146 in August to \$392,405 in September.

Manifestly the war is no "Chinese wall," at least against British woolen and worsted fabries. Latest advices are that British woolen machinery employed on government account is exceedingly active, but that the mills not so favored find trade exceedingly dull. They would be very eager to secure an outlet to America, and it is probable that there will be a substantial increase in British worsted and woolen exports to this country during the winter months of the present year.

British recruits are being garbed in blue serge, because the requisite stocks of khaki and blue-gray invisible cloth, such as the Germans wear, were not at first available. The Lord Mayor of Bradford early in the war was instructed by the government to obtain 15,000 pieces of serge for quick delivery, and it happened fortunately that there was more on hand of that type of cloth, in suitable weight, than of any other. The British khaki is of an olive shade, with a green tint, and the standard khaki cloths are described as being composed of worsted warps and woolen wefts. The 20-ounce winter suitings have two-fold 24's worsted warps, the warps having 40 ends to the inch, while the wefts have 52 picks to the inch. The cloth as finished is 56 inches wide. These British uniform cloths are not so fine in quality and presumably not so

attractive in appearance as the military cloths of the United States, and immense quantities of them will be required for hard winter campaigning in Flanders. It is stated by the military authorities that a good uniform will last a soldier at the front not more than six weeks. British mills capable of turning out the desired fabrics have exceedingly busy months before them, for including the troops on the Continent and the recruits at home, 1,500,000 officers and men are on the rolls of the British army—and a large part of the still greater French army is also to be provided for.

Under these conditions it is not unreasonable to expect that considerable emergency orders will be placed with American mills capable of furnishing these military fabrics.

WINTHROP L. MARVIN.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, ETC.,

Of Bulletin of the National Association of Wool Manufacturers, published quarterly at 683 Atlantic Avenue, Boston, Mass., required by the Act of August 24, 1912.

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Its principal executive officers are:

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Secretary and Treasurer, Winthrop L. Marvin, Boston, Mass.

There are no bonds, mortgages or securities of any kind.

WINTHROP L. MARVIN,

Editor.

Sworn to and subscribed before me this 28th day of September, 1914.

James G. Hill, Notary Public.

(My commission expires March 25, 1921.)

#### ACTIVE AND IDLE MACHINERY.

COMPARATIVE RETURNS FROM AMERICAN MILLS FOR FOUR QUARTERS UNDER THE NEW TARIFF.

The results of the quarterly inquiry of the National Association of Wool Manufacturers as to active and idle woolen machinery in the United States on September 1, 1914, were rather disappointing, in that they disclosed that except in the dress goods branch no marked improvement had occurred in the condition of the industry. Our tabular statement of answers covered again the greater part of all the woolen machinery in America, and showed that 26 per cent of the broad looms were idle on September 1, as compared with 24.6 per cent on June 1 preceding. Of looms of 50 inches reed space or less, the percentidle was 17.3, as compared with 25 per cent on June 1 and 17.7 per cent on March 2. In the carpet industry no fewer than 38.3 per cent of the looms were idle on September 1, as compared with 28.3 per cent on June 1. This branch of the industry as a whole is indeed suffering from serious depression, which now may be accentuated by the difficulty in procuring requisite wools.

These quarterly returns are looked to with increasing interest in the trade, and they will gather enhanced value as the inquiry goes on from quarter to quarter and from year to year. The comparative figures thus far compiled are as follows:

Machinery.	Total Number Reported.	In Operation.	Idle.	Per Cen	t of Idle to	o Total Re	eported.
	September 1, 1914.			Sept. 1, 1914.	June 1, 1914.	Mar. 2, 1914.	Dec. 1, 1913.
Looms, wider than							
50 in. reed space, Looms, 50 in. reed	34,216	25,343	8,873	26.	24.6	24.8	24.9
space, or less	8,194	6,774	1,420	17.3	25.	17.7	27.2
Looms, carpet Woolen cards,	2,323	1,433	890	38.3	28.3	24.5	32.1
sets	2,939	2,266	673	22.8	19.4	19.5	21.4
Worsted combs . Woolen spinning	1,327	1,048	279	21.	15.5	13.	23.1
spindles Worsted spinning	904,032	699,790	204,242	22.5	25,8	22.2	22.7
spindles	1,291,668	1,076,619	215,049	16.9	18.1	22.	26.

### Obituary.

#### WILLIAM A. DONALD.

Mr. William A. Donald, who was for many years a well-known Boston wool merchant and a member of the firm of Hallowell & Donald, — now Hallowell, Jones & Donald, — died on September 1 at his home in Chestnut Hill, Mass. Mr. Donald was a native of Andover, Mass., of Scotch descent. His wife, Mrs. Cornelia P. Donald, died a year ago. Mr. Donald leaves three children, Mrs. Frank W. Hallowell, of Chestnut Hill, whose husband is a member of the firm of Hallowell, Jones & Donald; Gordon Donald, also of this firm, and Malcolm Donald, a Boston lawyer.

#### STEPHEN R. CAPPS.

Mr. Stephen R. Capps, president of the Jacksonville (Ill.) Woolen Mills, J. Capps & Sons, Ltd., one of the largest wool manufacturing concerns of the Middle West, died August 4, after a notable business career of fifty years. The mill of which he was the head was founded by his father, Joseph Capps, in 1839. Mr. Stephen R. Capps was a native of Kentucky, a graduate of Illinois College in 1857, a director of the Central Bank, a trustee of the State School for the Deaf and a trustee of the Illinois Woman's College. He was a member of Grace Church in Jacksonville, and for half a century had conducted the men's Bible class in the Sunday school. He leaves five sons and three daughters. One of the sons, Alfred T. Capps, is the secretary of the company.

#### JOHN BUTLER SMITH.

Hon. John Butler Smith, a distinguished public man and manufacturer of New Hampshire, died on August 10 at his home in Hillsboro. Mr. Smith was a native of Vermont, born in 1838 at Saxton's River, but his youth was passed in Hillsboro. He established first a knit goods mill in Washington, N.H., and engaged afterward in manufacturing at Weare. But in 1865 Mr.

Smith returned to Hillsboro, founding the Contoocook Mills, which he successfully conducted for a long time. Finally he retired from the manufacture of hosiery to look after his large financial interests. Mr. Smith was an earnest Republican, an active leader of his party in the State, and in 1893–1894 Governor of New Hampshire. He was long a vice-president of the Home Market Club of Boston. He leaves a widow and two sons.

#### WILLIAM TINKHAM.

Mr. William Tinkham, one of the oldest woolen manufacturers in this country, died at his home in Providence, August 27, at the age of ninety-two. He was a native of Harmony Village, R.I., and while a young man engaged in the wool manufacture in a rented mill in Mapleville, with one set of machinery on jeans and tweeds. Later he entered upon the production of satinets, and then acquired the Harrisville Mill, and added it to his properties. Mr. Tinkham was one of the wool manufacturers who weathered the panic of 1857. In 1868 he became interested in the Carolina Mills of Richmond, and in 1873 he purchased the interest of Mr. Steere in the firm of Steere & Tinkham. When the new mill was built in Harrisville in 1909 the work was done under his own personal supervision, although he was then eighty-six years old, and up to his death he was actively occupied in his woolen business. But Mr. Tinkham was conspicuous also in the railroad affairs of Rhode Island, having founded the Providence & Springfield line, of which he remained president until his death. He leaves two children.

## Editorial and Industrial Miscellany.

#### THE BRITISH WOOL EMBARGO.

COMPELLING NEW CURRENTS OF TRADE — OUR WOOL IMPORTS IN THE PAST FROM THE UNITED KINGDOM.

WAR is more and more upsetting the commerce of the world. At the London wool sales on Tuesday, October 6, this startling notice was published:

The government desires it known that the exportation of raw sheep and lambs' wool from the United Kingdom to European countries other than Russia, Belgium, France, Spain and Portugal is prohibited. The government also desires to make it known to buyers of wool for exportation to other destinations that it is at their risk, as circumstances may make it necessary to extend the scope of the prohibition at any moment.

Later on, in the midst of the sales, it was announced that the government had prohibited the export of raw wool from England to all countries.

Later still it was explained that the prohibition was confined to crossbred and native wools, and did not apply to merino wools, provided these were bought for shipment to and consumption in neutral countries.

The text of the order as promulgated by the Board of Trade, so far as it applies to the wool trade, is as follows:

That the export of the following articles to foreign ports in Europe and on the Mediterranean and Black Seas with the exception of those of France, Russia (except Baltic ports), Belgium, Spain, and Portugal be prohibited, viz.: undressed goat-skins, sheep skins wooled (i.e., with the wool left on).

That the export of the following articles be prohibited to all foreign ports other than those situated in His Majesty's dominions, colonies not possessing responsible government, possessions, and protectorates: Woolen and worsted yarns, all woolen and worsted cloth without pattern (except women's dress stuffs and cloth manufactured from merino wool) if suitable for uniform clothing, cardigan jackets, woolen jerseys, woolen gloves, woolen socks, and men's woolen underwear of all kinds.

That the export of the following articles be prohibited to all destinations: — woolen waste, woolen rags applicable to other uses than manure, pulled or not, woolen tops, woolen noils.

In elucidation of the embargo, Mr. J. H. Robinson, President of the Bradford Chamber of Commerce, after an interview with the Parliamentary Secretary of the Board of Trade has stated that the Board of Trade was most anxious to do all that could be done to prevent a hampering of trade, and did not wish to prohibit anything except goods suitable for uniform clothing.

If any exporter had a doubt about goods which, although not made for uniform clothing, might be used for such, he should submit patterns to the Board of Trade, who would say if export was prohibited. All kinds of yarns and piece goods could be supplied under license to the governments as well as to traders of our allies, provided that the orders for the same were sent by or through their respective governments. In the case of yarns already made which were not suitable for uniform clothing, samples should be submitted to the Board of Trade, who would decide whether they would allow their exportation seeing the yarns were ready for shipment. Merino yarns could be exported under license; mohair, alpaca, and the like were not included in the prohibition.

Such an embargo was not wholly unanticipated, but it has had a disturbing influence upon the wool trade of the entire world. It is supposed to have been prompted by the fact that suspiciously large orders for wool and partly manufactured wool products were being received in the British markets for concerns in certain neutral countries, particularly Scandinavia, that had not been in the habit of dealing on so great a scale. These extraordinary transactions aroused a belief that the merchandise in question was really intended for German and Austrian use, and that once in Scandinavia it would quickly find its way southward.

Thus one motive of the embargo was to strike a blow at the German-Austrian wool manufacture, and prevent the clothing of hostile armies with wool from British hands. This is intelligible enough, and equally intelligible is the desire of the British government to make certain of adequate warm apparel for the British army on the Continent and the far greater armies of its allies, France and Russia. The Russian government declared an embargo on wool at the outset of the war, and the French wool manufacturing industry, located as it is largely in the north of France, has been seriously crippled or destroyed by the operations of the contending armies.

A fair warning is given that the terms of the British embargo

may be modified or extended at any time. The immediate effect was to produce a flurry and force up still further the prices of raw wool in America — thus creating a new and difficult problem for manufacturers who are not in a position, in view of the continued business dulness, to command indefinite advances in the price of finished goods.

The United States has been in the habit of receiving a very considerable part of its imported wool through the ports of the United Kingdom. Thus in the fiscal year ending June 30, 1912, no less than 54,955,918 pounds of wool came to this country from British ports, out of a total importation from all the world of 193,770,721 pounds. Out of these imports of 54,955,918 pounds from the United Kingdom, only 13,654,989 pounds, or about one-fourth, represented wools of British production, of which 761,657 pounds were of Class I, 5,477,562 of Class II, and 7,415,770 of Class III. American mills are, therefore, not especially important consumers of British wools, though our imports of Class II wools particularly represent special qualities and urgent needs which could not be supplied without difficulty elsewhere.

In the fiscal year ending June 30, 1913, our imports of raw wool from the United Kingdom were slightly less than in the preceding year, or 53,266,486 pounds, of which 19,324,888 pounds represented the products of England, Scotland, and Ireland. In this fiscal year our total imports of wool from all countries were 171,591,159 pounds.

Finally, in the fiscal year ending June 30, 1914, our imports of raw wool from the United Kingdom were 76,634,286 pounds, of which 22,023,698 pounds represented the native product of the United Kingdom. Our total importations from all countries in the fiscal year 1914 were 245,931,772 pounds.

Great Britain's world-girdling mercantile marine and her banking and exchange facilities make her a great distributing center for wool as for other commodities of general trade. Through the United Kingdom we imported in 1914, 13,294,172 pounds of wool from Australia and Tasmania, practically all of Class I, 20,091,661 pounds of wool from New Zealand, also nearly all of Class I, and 11,138,454 pounds of wool from British India, nearly all, of course, of the Class III or carpet variety. Through the United Kingdom also came 2,849,485 pounds of Argentine wool, nearly all of Class I, as well as 1,028,572 pounds of wool from the Cape, 1,356,124 pounds of wool from Turkey in Asia, and

considerable quantities from Chile, Peru, Uruguay, China, and Russia.

If the British wool embargo continues, the problem of American wool merchants and manufacturers will be to procure their imported wool supplies direct. This ought to be practicable for, excepting the German and Austrian services, the steamship lines that were in existence before the war are now operating in the main to and from all quarters of the globe. Sailings are not quite so frequent, and schedules are liable to interruption before a sudden foray of swift German cruisers that are still left uncaught. But these cruisers will not touch steamers under the American or other neutral flags. It is a good time to remember that there is a regular American steamship line across the Pacific from Australasia to San Francisco, with fast ships of considerable freight capacity, and that from San Francisco there are several regular lines of American coastwise steamers through the Panama Canal by which Australasian wool can be readily brought to Boston, New York, and Philadelphia. There is another American line of steamships, the Pacific Mail, from Japan and China to San Francisco. These steamers all load homeward at Hong Kong. where East India wools can be assembled.

There is at present no regular American steamship service from the River Plate countries — from Uruguay and Argentina. But an American line of freight steamers operated by the United States Steel Corporation runs southward from New York as far as Brazil, and if it were necessary its service could be extended to Buenos Ayres. There is no American steamship service to or from the Cape of Good Hope, but from the Cape, as from the east and west coasts of South America, there are British freight services that have not been and are not likely to be seriously interfered with by the German navy.

Such foreign wools as are needed from other than British sources can be brought to America without the intervention of British middlemen. There may be inconvenience at first, but direct imports may grow to be a regular practice. The embargo is likely to make a heavier demand in the United States for the crossbred wools of South America.

Following are the detailed statistics of exports of wool from the United Kingdom to the United States for the fiscal years 1912-1914:

# THE WOOL TRADE OF THE UNITED KINGDOM WITH THE UNITED STATES.

Exports of Wool by Classes for the Fiscal Years 1912-1914, Inclusive, Showing Country of Production.

#### 1912.

Country of Production.	Class I.	Class II.	Class III.	Total.
Austria-Hungary			Pounds. 50,193	Pounds. 50,193
Iceland Portugal Russia in Europe	1::::::	102,926	42,049 176,880 217,676	42,049 176,880 320,602
Spain Turkey in Europe	761,657	5,477,562	36,222 246,916 7,415,770	36,222 246,916 13,654,989
British East Indies		17,445 1,734	11,225,779 572,799 286,853	11,276,061 574,533 286,853
Turkey in Asia	127,350 17,068	982 101,684	1,555,390 108,362	1,556,372 337,396 17,068
Argentina	459,057	31,451		1,732,707 $31,451$ $459,057$
Falkland Islands	10,382,165	230,203	78,075	20,497 10,460,240 13,675,832
Total	26,751,314	5,963,987	22,240,617	54,955,918

#### 1913.

Country of Production.	Class I.	Class II.	Class III.	Total.
	Pounds.	Pounds.	Pounds.	Pounds.
France			236,782	236,782
Iceland			265,415	265,415
Portugal			94,869	94,869
Russia in Europe			225,725	225,725
Spain			20,749	20,749
Turkey in Europe		232,552	573,225	805,777
England	880,238	7,559,094	2,003,363	•
"		69,343	1	
"		137,032	[ ]	
Scotland		66,774	1,601,240	19,324,888
"		463,775	5,812,375	
Ireland		667,967	9,036	
"			21,120	
British South Africa			70,153	227,186
British East Indies			6,245,916	$\epsilon, 245, 916$
			555,943	555.943
Persia			38,929	38,929
Russia in Asia			110,298	110,298
Turkey in Asia		76,558	2,156,009	2,232,567
Argentina			18,639	2,132,519
Chile				114.504
Peru		19,734		39,770
Uruguay				89,752
Venezuela			14,509	14,509
Falkland Islands				55,166
Australia and Tasmania				5,230,674
New Zealand		32,592	!	15,204,548
66 66	30,840			19,204,948
Total	. 23,735,140	9,457,051	20,074,295	53,266,486

# THE WOOL TRADE OF THE UNITED KINGDOM WITH THE UNITED STATES. — Continued.

1914.

Country of Production.	Class I.	Class II.	Class III.	Total.
British South Africa	Pounds.	Pounds. 30,838	Pounds.	Pounds. 30,838
United Kingdom		10,395,373	7,416,182	22,023,698
Belgium		3,003	16,177	19,180
		12,716	12,548	43,454
Germany		1,639	286,534	291,860
Iceland			42,100	80,974
Italy			49,460	49,460
Portugal			413,275	430,054
Russia in Europe			28,010	28,010
Spain			293,054	298,889
Turkey in Europe	11 116	5,834		11,138,454
British India	11,116 867	9,588	11,117,750 563,237	
China				564,104
Persia	25,745		27,014	52,759 18,731
Russia in Asia	· · · · · ·		18,731	
Turkey in Asia	50.005	439,914	916,210	1,356.124 58,295
British East Africa	58,295	100 100		
British South Africa	919,092	109,480	10,000	1,028,572
British West Africa			49,905	49,905
Egypt	99,585	10,808	171,482	281,875
Argentina	2,714,092	10,294	125,099	2,849,485
Chile	772,742	140.700	17,650	790,392
Peru	295,141	142,702	838,642	776,485
Jruguay	927,886		4,269	932,155
Falkland Islands	54,701			54,701
Australia and Tasmania	13,291,802	272,272	2,370	13,294,172
New Zealand	19,812,911	272,272	6,478	20,091,661
Total	43,273,648	11,444,461	21,916,177	76,634,286

According to the consular figures, the exports from the Bradford district to the United States during September amounted in value to £563,871, as compared with £465,628 for August, and £735,030 for July. The exports were divided as follows:

	September, 1914.	August, 1914.
Wool	£156,404	£128,661
Tops	54,703	19,668
Worsted and mohair yarns	41,355	
Wool and mohair yarns		29,049
Worsted cloth	49,604	36,374
Woolens	14,008	23,698
Mohairs	35,722	36,821
Dress goods, linings and Italians	80,634	75,238

#### THE PROBLEM OF DYESTUFFS.

## AN AMERICAN SHIP SENT FOR THESE INDISPENSABLE MATERIALS OF TEXTILE MANUFACTURING.

When the European war began, with August, 1914, there was believed to be about two or three months' supply on the average in the textile mills of the United States of such essential dyestuffs as were imported chiefly from Germany. Here and there a forehanded mill had a larger amount, and, of course, there were considerable supplies on hand in the warehouses of the dyestuff merchants. But the immediate cutting off of communication with Germany produced something like a panic in the trade, which was not at all allayed when the report came that an absolute embargo was to be put upon the export of dyestuffs by the German government.

All this was a sharp shock to the whole textile industry, which had been aware in a general way of its dependence upon European sources of supply, but had not dreamed that that supply would ever be wholly interrupted. At first a cry went up for the immediate domestication of the entire dyestuff industry in the United States. How slow and difficult this task would be is soberly emphasized by a famous expert, Dr. Louis Joseph Mátos, in one of the leading articles of this present Bulletin. Dr. Mátos is wholly sympathetic with the purpose, but shows dispassionately why the thing cannot at once be done.

Of our total importations of coal-tar dyes 80 per cent or more have been coming from Germany. They are the product of high scientific skill and unsparing patience, and while the final creation of an American dyestuff industry is no more impossible than other achievements in industrial lines have proved impossible, yet the work would demand a very great capital and a considerable time.

Unfortunately the political party now in power in the United States does not believe in a protective tariff, and an adequate protective tariff is the first essential step toward the beginning of a domestication of the industry. In a recent article in the "Textile Manufacturers Journal," Mr. I. F. Stone, the president of the National Aniline & Chemical Company, points out that on indigo and alizarin colors there is now no tariff duty at all. "Theoretically, therefore," says Mr. Stone, "they should be sold very cheap, but, as a matter of fact, by reason of no competition

here, they are controlled by conventions in Europe which make a uniform price, and consumers are, therefore, unquestionably paying more than they would have to pay if such products were made here in competition."

"On the other hand," adds Mr. Stone, "take, for instance, direct cotton black, which is an aniline dye, which has a protective duty of 30 per cent and which is made in this country in large quantities, and on which the Europeans have been obliged to reduce their selling prices in this country to less than they sell for in Europe, so that American consumers are enjoying prices as low as 17 to 18 cents for a color which sells at 22 cents and upward in Europe under normal conditions." These circumstances are undeniably a strong argument for protection, but protection cannot now be had. It would take a long time anyway to work out the desired result, but the immediate or early application of it is impossible.

Therefore it is and for a long time will be absolutely necessary to depend upon existing sources abroad. Some excellent dyestuffs are made in Switzerland, hemmed in by nations at war. When the Swiss manufacturers endeavored to send their goods to the United States across Germany they found the process difficult, and even the forwarding of German dyes down the Rhine to the neutral port of Rotterdam has not been achieved without invoking the official efforts of our State Department.

Early in the war the British Admiralty began to seize and bring into British ports for examination the neutral steamers of the Holland-America Line from New York for Rotterdam. Their mails were searched, and German or Austrian reservists found on board were seized as prisoners of war. So far as is known, there was no attempt to remove portions of the cargoes, and there was no such interruption of the voyages of the same ships from Rotterdam to America.

However, in order to make assurance doubly sure, and to meet a significant request of the German government, an American steamer, the "Matanzas," of the Ward-West India Line, with a capacity of about 5,000 tons, was chartered for a special voyage from New York to Rotterdam in the name of Mr. A. M. Patterson, the president of the Textile Alliance. The leading spirit in this undertaking was Hon. Herman A. Metz, a Representative in Congress from New York, and president of the Farbwerke-Hoechst Company. Mr. Metz had busied himself at Washington

as well as at New York in an effort to keep open the line of communication from the dye works on the Rhine to the mills of this country, and he certainly deserves the gratitude of manufacturers.

It is understood that space is to be allotted in the "Matanzas" to all the large dyestuff houses, and that the goods may be expected some time in November. It is believed that an American steamship will not be interfered with or delayed by the British cruisers in the North Sea, and if the experiment is successful another American ship will be sent to Rotterdam.

The German government is naturally solicitous that these indispensable dyestuffs shall not fall into the hands of British manufacturers. There was a report at one time that German dyestuffs were being shipped from this country to Great Britain via Canada. This report has been contradicted, but it made the German authorities restive, and probably inspired the talk of an embargo.

On the other hand, the British government will not relish the payment of many thousands of dollars of American money to German dyestuff manufacturers on the Rhine, thus fortifying the financial resources of the formidable enemy of the allies. But technically, under the law of nations, the United States, which is not at war with Germany, has a perfect right to bring German dyestuffs under its own flag from the neutral ports of Holland, which are not and cannot be blockaded by the British fleet without making Holland also a belligerent. Ambassador Gerard, in signifying that there would be no German objection to the shipment of these dyestuffs in an American steamer, suggested that the American ship might bring to Rotterdam raw cotton or foodstuffs or provisions which are not contraband of war. because of the need of haste and possibly because of the fear of complications, the "Matanzas" was sent out in ballast without freight of any kind. The State Department did not invoke the protection of belligerent governments for this American ship, but contented itself with announcing the mission on which it had sailed - a perfectly lawful voyage with which there cannot be lawful interference. According to Mr. Metz, a supply of 1,500 tons of dyestuffs a month will keep the American textile mills in operation. So the problem of a dyestuff supply, so difficult at first, does not at present writing seem insuperable.

On October 24 it was reported that an embargo had been placed upon the export of wool from Australasia, and it was reported also that the export of wool from British South Africa, except to the United Kingdom, would be forbidden.

#### CLOTHING NO CHEAPER YET.

THE SIGNIFICANT INQUIRY OF THE "AMERICAN SHEEP BREEDER" AMONG THE MERCHANTS OF CHICAGO.

To the wool growers and farmers of the West, Editor W. W. Burch of the "American Sheep Breeder" is demonstrating that the new tariff for revenue only has not brought any reduction in the price of clothing. In answer to inquiries, Hart, Schaffner & Marx, one of the greatest of manufacturing-clothier houses, state that the prices of their clothing in the last eight months have advanced slightly. Retail clothing houses state that "Our merchandise is sold at about the same prices as eight months ago - in other words, we cannot as yet see any appreciable difference." This is the declaration of The Hub in Chicago, Henry C. Lytton & Sons. In the same city Maurice L. Rothschild states that "Candidly, I do not think there is any change of intrinsic value between the prices now and eight months ago." Another ready-to-wear house, Klee Brothers & Company, says that "We find the prices for ready-to-wear clothing for men and boys for this fall season slightly higher than they were eight months ago." For Yondorf Brothers Company Albert Schroeder replies that "The increased cost of production has about offset the reduction in the price of woolens."

Among the department stores Marshall Field & Company say that "Men's ready-to-wear suits show a decided reduction in price," but it is added that this is for clearance sales. Another large house, Mandel Brothers, says that there is no material change in prices of ready-to-wear clothing. Rothschild & Company proclaim a belief that "The fabrics of the day are very much better than a year ago," and that there has been "no material difference in the cost of the same, particularly in the worsted fabrics."

The facts testified to by these great department stores cover, of course, the experience of the average purchasers of clothing. But Editor Burch put some timely questions also to the tailoring houses of Chicago. One of these houses, the Edward Ely Company, indicates that the prices asked for suits and overcoats, which have been from \$50 to \$85, remain the same. There has been a decline in the cost of materials of from 25 cents to 75 cents a yard, "which would make on the average about \$1.75 less on the desired quantity of cloth required for a suit." But,

"while the cost of the materials is somewhat less than a year ago, the price of high-grade labor has advanced more than enough to offset it." So the wearers of these tailor-made garments of good or high quality are paying in Chicago as much for their clothing as they did before the new tariff was enacted.

Another tailoring concern, the Grant Company, Max M. Katz, president, has had an illuminating experience. "When the new tariff laws first went into effect," says Mr. Katz, "we were able to give a 10 per cent better value for the money than we had theretofore, using both foreign and domestic woolens. We, however, found the foreign goods unsatisfactory in a great many instances, due to faulty construction and poor delivery. In lieu thereof we are buying nearly all domestic goods, and find a steady raise in the price for them. So far we have made no advance in our prices." This house manufactures suits for from \$10 to \$30, catering, therefore, to the masses of the people. The advance in the price of fabrics which Mr. Katz notes is presumably due to a rising cost of materials.

Another Chicago tailor, W. S. Mills, who has specialized for fifteen years in the making of suits for from \$35 to \$45 and of overcoats for from \$35 to \$65, finds that the cost of his materials, which went down slightly after the new tariff was enacted, is now again advancing. Another concern, Charles Anderson & Sons, states that "though goods are from 20 to 25 per cent cheaper, this saving is offset by increase in labor and especially in the price of canvas and trimmings. Our average price for suits is \$35, our minimum \$30 and our maximum \$45." Manifestly, the purchasers of garments of this grade in stores in Chicago are paying just as much money for their clothing as they were a year or two ago under the Aldrich-Payne tariff, with wool on the dutiable list.

Another Chicago merchant, Mr. J. M. Maxson, of the Ordway Company, reports to Editor Burch that "In the grade of suits we make there has been no change in prices." That is to say, the customers of the Ordway Company buying made-to-order suits are paying as much for their apparel as they ever did. But Mr. Maxson makes this interesting statement: "We find some cloths (the imported ones) are from 10 to 20 per cent cheaper, and the result is we are using mostly imported cloths which cost us the same as the American cloths we made our suits of eight months ago. As to values, the customer gets the same as when

he was wearing our country's make of goods, but he is letting the foreigner make the cloth and raise the wool and fix the prices of what we make and grow." It is clear that this particular Chicago merchant has no exalted opinion of the economic wisdom of the Simmons-Underwood tariff law.

Information of the kind evoked by the "American Sheep Breeder" in its impartial inquiry can advantageously be distributed throughout the farming regions of the West, which contributed so heavily to the temporary overthrow of the protective system. The farmers of these Western commonwealths were promised the boon of cheaper clothing as an inducement to support anti-protectionist candidates for Congress. It was a tempting bait, but entirely delusive, as this inquiry of the "Sheep Breeder" demonstrates.

#### FROM THE WOOL GROWING STANDPOINT.

# CONGRESSMAN MONDELL'S CLEAR EXPOSITION OF THE RESULTS OF THE NEW TARIFF POLICY.

In the National House of Representatives one of the ablest of the protectionist Congressmen from the great West, Hon. Frank W. Mondell, of Wyoming, recently discussed with vigor and information the effect of the Simmons-Underwood tariff on the industry so vital to the welfare of his constituents. Mr. Mondell traced the course of typical wool prices from the normal protective year of 1909 down to the practical accomplishment of free wool on May 8, 1913, when the House passed the new tariff bill, with wool on the free list. He showed that the average wholesale price of Ohio fine unwashed wool in the Boston market for the five years 1905-1909, inclusive, and for the year 1909 was  $25\frac{1}{2}$  cents a pound; for 1910, 24 cents; for 1911, 20 cents; for 1912, 23 cents, and after the passage of the Underwood bill by the House, 21 and 20 cents. "From a study of these official figures," declared Mr. Mondell, "it will be seen that the Boston prices of Ohio fine wool averaged much higher under protection than since. In 1909 and before, when prices were normal and not depressed by tariff agitation, the price averaged at least 31 cents higher per pound than since free wool was decreed."

Mr. Mondell also examined the range of prices of territorial wools — merino and crossbred wools — from the Rocky Mountain

and range States, citing for this purpose "the figures in regard to that class of wool from tables furnished me by the National Association of Wool Manufacturers, whose figures are the most reliable to be obtained anywhere and universally accepted as being trustworthy."

Mr. Mondell showed that the average price of territory stable fine and fine medium unwashed wool on the Boston market for 1909 was 26 cents a pound; for 1910, approximately 24 cents; for 1911, 22 cents; for 1912,  $23\frac{3}{4}$  cents; for 1913, 21 cents, and for 1914, up to June 30, 21 cents. "From a reading of these figures," said Mr. Mondell, "it is very clear that the Boston price of territorial wools was considerably higher under normal conditions of protection than it has been under the Simmons-Underwood bill, being 5 cents a pound higher in 1909 than in 1914. The agitation against the wool schedule in 1910, which is well remembered, brought the wholesale price of these wools down 2 cents a pound, and still they averaged 4 cents a pound higher than this year. The continued agitation of 1911 reduced the price somewhat lower but still a cent higher than this year; and in 1912 the average price was  $2\frac{3}{4}$  cents higher than this year. When, however, in May, 1913, it became certain that we were to have free wool, the price dropped from 24 to 22 cents, and on down to 191 cents, or an average of 21 cents — the same, according to these tables, as the average price up to the last of June of this year."

From these facts and figures Mr. Mondell contended that "The markets of the world present no conditions which have warranted American wool being lower at any time since than it averaged in 1909. There is no reason other than tariff agitation and change why the wool grower should not have received as much or more than he received that year, for the foreign price has frequently been higher. The only reason or cause for the lower prices since 1909 has been the agitation for and the official passage of the free wool bill. Free trade in wool actually went into effect in May, 1913, when the Underwood bill passed the House, so far as prices were concerned."

A very great loss to the 600,000 wool growers of the United States is impressively figured out by Mr. Mondell. On the basis of the difference in the average price of Ohio fine unwashed wool in Boston in 1909 and 1914, the shrinkage in value of the 328,000,000 pound clip of 1909, he said, would be approximately \$13,000,000. Even that did not represent the total loss to the wool industry by reason of the agitation for free trade in wool, "for that agitation so discouraged the farmers and flockmasters of the country, that they reduced their flocks to such an extent that the wool clip of 1914 was but 270,000,000 pounds, or more than 58,000,000 pounds less than the clip of 1909. Assuming as low an average price as 21 cents a pound wholesale, this represents a loss of approximately \$12,000,000 in the value of the wool clip as between the years referred to, or a total loss to the wool industry in 1914, as compared with 1909, of \$25,000,000. If you make this comparison on territorial wools, both as to the wool actually produced in 1914 and as to the shortage in 1909 and 1914, you will have a figure of loss several millions greater."

But this was the loss for a single year, and the wool clip has been steadily declining since the year 1909. "If we figure the actual loss to the wool industry based on the reduced prices during this whole period of agitation for free trade and of actual free trade, as compared with the normal protection year of 1909," said Mr. Mondell, "we find an average loss of  $3\frac{1}{2}$  cents a pound at the most conservative estimate, which, on the total of 1,500,000,000 pounds produced and sold since 1909, amounts to over \$64,000,000."

There has been more than a loss in wool, for, as Mr. Mondell further pointed out, "in 1909 we had over 42,000,000 sheep other than lambs; in 1914 approximately 34,000,000, a loss of over 8,000,000, or about 20 per cent. Thus one of our important sources of meat supply dwindles in face of the hostile attitude of the Democratic party, and thus the Democratic party aids in advancing the cost of living, while claiming to be laboring for its reduction."

This was a significant speech of the able Representative from Wyoming. No answer or attempted answer to it came from the anti-protectionist side of the House of Representatives. There was no reply when Mr. Mondell showed that not only had 20 per cent of the sheep of the United States been lost, but that in seven months about \$20,000,000 of revenue in customs taxes on foreign wool had been sacrificed. And what has been the compensation? Cloth from the mills has undoubtedly been sold at a somewhat lower price, but this reduction, though made by the cloth manufacturers, has not been handed down to the ultimate consumers. Mr. Mondell was right when he contended in his

address that "People are paying substantially the same prices for woolen goods that they paid before the passage of the Simmons-Underwood law." And he continued: "If there is to be any reduction in the cost of woolen goods by reason of free trade in wool it should have come long since, for the threat of free trade in wool sent domestic wool last year — that is, the season of 1913 — to a free trade basis and below, as I have heretofore stated. That being the case, the American woolen goods of last winter, as well as of this summer, so far as they were made of domestic wool, were made out of wool bought as cheaply or more cheaply than the same wools are selling for now. Therefore, our free trade friends cannot reasonably claim that cheaper goods are coming later as a result of their tariff legislation. Their cheap goods are already long overdue."

Congressman Mondell summarized the result of the anti-protectionist agitation and of the revision of Schedule K as follows:

The result of this Democratic free-wool agitation since 1909 and its actual consummation in 1913 has been —

To reduce the number of sheep in the United States more than 8,000,000 — a value of over \$32,000,000;

To reduce the wool clip of the United States more than 130,000,000 pounds, or over \$30,000,000;

To reduce the income of growers of "Ohio" wool more than \$6,000,000 on the 1914 free-trade clip and prices as compared with the 1909 protection clip and prices;

To reduce the income of Territorial woolgrowers more than \$12,000,000 on the 1914 clip and prices under free trade as compared with the 1909 clip and prices under protection;

To reduce the income of the wool producers of the country during this period of agitation and consummation of free trade at least \$85,000,000.

To reduce the income of the Nation on loss of revenues on imported wool in seven months nearly \$20,000,000; and

To deprive textile workers of at least \$5,000,000 of wages on account of increased importations of woolen goods.

As a supplement to his address, Mr. Mondell published the following summary of prices of territory staple fine and fine medium unwashed wools in each month from January, 1909, to June, 1914—a table well worth publishing here, as follows:

#### WOOL PRICES.

#### [National Association of Wool Manufacturers.]

### Territory staple fine and fine medium, unwashed.

1909.	Cents.
January	23
February	23.5
March	23.7
April	24
May	24 5
June	26
July	27
August	<b>2</b> 8
September	28
October	28
November	28
December	27.6
•	
1910.	
January	27
February	26.8
March	26
April	25
May	<b>2</b> 3
June	22.4
July	22.4
August	22.7
September	22.7
October	<b>2</b> 3
November	<b>2</b> 3
December	23
1911.	
January	24
February	22
March	20.5
April	19.5
May	19
June	19
July	19.5
August	20
September	22
October	22.5
November	23
D t	00

#### WOOL PRICES. - Continued.

1912.	Cents.
January	23
February	23
March	23
April	23
May	23
June	23
July	23.5
August	25
September	25
October	25
November	24.5
December	24.5
1913.	
January	24.5
February	24
March	22
April	21
May	21
June	20
July	20
August	20
September	20
October	20
November	20
December	19.5
December	10.0
****	
1914,	
January	19.5
February	20.5
March	21
April	21.5
May	22
June	22.2

Mr. Mondell presented also from the Department of Agriculture the average prices of Ohio fine unwashed wool in each year from 1905-1912, inclusive, and in each month from January, 1913, to May, 1914.

# Wool Prices. [Farmers' Bulletin 575, Department of Agriculture.] Ohio fine, unwashed.

Year.	Low.	High.
1905	23	30
1906	24	28
1907	25	28
1908	19	27
1909	23	28
1910	20	28
1911	18	22
1912	21	25
1913.		
January	24	24
February	24	24
March	23	24
April	21	$23\frac{1}{2}$
May	20	21
June	20	21
July	20	21
August	20	21
September	20	21
October	20	21
November	20	21
December	20	21
1914.		
January	20	214
February	$\frac{211}{5}$	22
March	$\frac{2}{2}$	
April	$\frac{22}{22}$	
May	$\frac{22}{22}$	23

These were his records of the wool clip and the number of sheep of the United States:

#### WOOL CLIP OF THE UNITED STATES.

Figures of Department of Agriculture for 1909, 1910, 1911, and 1912, and National Association of Wool Manufacturers for 1913 and 1914:

1909	328,110,749
1910	321,362,750
1911	318,547,900
1912	304,043,400
1913	296,175,300
1914 (estimated)	270,000,000

#### SHEEP IN THE UNITED STATES.

#### Figures of Department of Agriculture:

1909	43,293,205
1910	41,999,500
1911	39,761,000
1912	38,481,000
1913	36,319,000
1914 (estimated)	34,600,000
Loss since 1909	8,293,105

This address of Representative Mondell is a notably clear and fair review of the course of the past few years from the standpoint of the wool growers of the Rocky Mountains and the Middle West. Mr. Mondell appreciates the importance of a strong American wool manufacturing industry. "If American mills are closed," he said, "it is immaterial whether or no there is a duty on wool." His words have gained increased impressiveness since they were uttered, for the great European war has reëmphasized the importance of a large and constant supply of American-grown wools.

#### AUSTRALIA IN WAR TIME.

#### A GRAPHIC PORTRAYAL OF THE WOOL TRADE AS AFFECTED BY THE GREAT CONFLICT IN EUROPE.

THE "Wool Record" of Bradford, England, contains this interesting description from its Sydney correspondent of the complete upsetting in the Australian wool trade wrought by the European war:

Never in all my long experience of the wool trade have I known such conditions prevailing as at the present moment. I do not even know that this letter will reach its destination, but I must do what most other people are doing at the present moment—chance it. Should it reach its destination you will have knowledge of what is, perhaps mercifully, hidden from us at present. Still it will be of interest to learn how we, more than 10,000 miles away from the scene of misery and bloodshed, view the position. Let me say plainly that the happenings of the last nine days are regarded without one spark of disloyalty to the great Empire of which we are a part; yet with a huge feeling of vain regret. England is credited with having done all that a nation honorably could to avoid participating in what promises to be the greatest holocaust of modern times, and we

recognize that she cannot be other than true to her Allies. The Committee which governs the destinies of the Sydney and Brisbane branches of the wool trade, even at the present moment of excited feelings of nationality, gives in its way an indication of what might have been, if calmer judgments had swayed the powers that be. With their own nations practically at each other's throats, it is somewhat of an object lesson to see French. German, and English wool buyers, sitting together, calmly discussing such arrangements as may be necessary for the good government of the trade. They are old comrades of long years standing; but what feelings must be beneath the surface. prosperous business of but yesterday is a thing of the past to-day; the brightest of outlooks is changed to one of the deepest gloom. I can remember the time of the Franco-Prussian war and all the bitter feelings it involved. There is no partisanship to-day, no sense of exultation; but a deep gloom and a fervent wish that this might not have been. I venture to say that this war, apart from the feeling of patriotism which we all share alike, will have to look for sympathy to the military element; it will receive none from trade or commerce.

#### AS TO THE FUTURE.

In the present condition of affairs it will be practically useless to hold auction sales of wool. Every effort will probably be made to store as much wool as possible in the wool sheds in the country, whilst the selling brokers' accommodation will probably be taxed to the uttermost here in Sydney. All are united in the desire to help to tide over the exigencies of the present time.

#### CABLE DIFFICULTIES.

A strict censorship over cable messages is being exercised. Several foreign buyers have cabled to the Continent, including Antwerp, without being able to get replies, although the messages were in plain English, and often of an urgent and private character. This fact alone will make business impossible as long as it lasts. English cables seem to reach London safely.

#### WAR AT LAST.

Just as my letter is going to the post the Prime Minister of Australia announced the official news that England is at war with Germany; and also that Germany is at war with France. There is gloom everywhere, business is impossible, but the loyalty of Australia is undoubted. Hard times are ahead, and every one, even many German residents, blame Germany. On all hands it is admitted that England and France have done their utmost to preserve peace. May they reap the reward of their efforts!

#### THE WAR OF NATIONS.

We all know, from past experience, how little is needed to disturb commercial confidence. A remote war, industrial strife. change of fashion, and many other circumstances of less importance, may all bring this about. Europe, face to face with its great trials of the present, probably envies Australia its remoteness from the scene of strife; but even here we have a very serious time of trouble, which will become more severe as time goes on. Remember we are essentially producers of raw material, and that for the time being our business has suddenly come to a standstill. We have to watch our products accumulating, without being able to export or turn a pound's weight into the much needed cash. Such a sudden and unprecedented stop to all exports means that our very life's blood is being slowly but surely sapped away; no exports, no financing, and, of course, no possibility of keeping people in their employment. We have, of course, a certain advantage in the fact that our climate, to a very great extent, mitigates the hardships which the unemployed may soon be called upon to suffer. It is estimated that we shall soon have in this State alone as many as 200,000 out of employment. But every one is making great efforts to tide over the emergency of the moment. Most business houses, limited companies, and so on, are doing their best to keep their hands on, preferring a general reduction in salary, from the managing director downward, to dismissing a single employee. Think what it means in times like the present to dismiss a married man with children. It is akin to a sentence of great hardship, and perhaps partial starvation. And through all this trial and tribulation, not one murmur against the old country. The interest in the war is as keen here as it could possibly be. People buy five or six copies of a paper during a single day, all eager for the smallest scrap of news; and I regret to say there are a few papers which seem to pay more regard to the possible increase in their circulation than to the correctness of the news published, or the anxiety they cause their readers.

I might add that the Selling Brokers' Association, and the Wool Buyers' Association, have combined to create a fund to help the wives and families of woolbuyers who have been called to their countries to serve with the colors. My readers can easily, imagine that we are without any feeling against any individual. Many of us have been on the friendliest terms, for many a long year, with these men who have their duty to perform to their country, the same as every Englishman has. We wish them a safe return, and hope they will arrive at their destination in time

to find that the war is over.

#### DEALING WITH THE CLIP.

One great difficulty which we have to face is the storage of the coming clip. With no prospect of being able to hold sales and export the wool, accommodation has to be found for something like 800.000 or 900.000 bales. The storage in Sydney is ample for the usual requirements of the trade; but not for anything like such an accumulation as is referred to. Every effort is being made to induce growers to store, whenever they can, the clip in the sheds in which the shearing is done. Our difficulties can be estimated when one considers that in recent years quite 75 per cent of New South Wales' production has been taken by the Continental Powers now at war, one with the other. It is, if I may say so, England's opportunity. If Yorkshire and other wool manufacturing districts can rise to the occasion, their time has come. They can once more get a grip of the wool trade, which will not be easily relaxed in the future. I have no hesitation in saying that after the war there will be a strong prejudice against goods made by at least one Continental power. I am only reflecting what is openly stated in public, though personally I regret such a circumstance, feeling sure that the commercial communities of all countries are not in sympathy with war. Had it been left to business men there would have been no war. of that I feel convinced.

SYDNEY, August 11, 1914.

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF WOOL AND MANUFACTURES OF WOOL FOR THE TWELVE MONTHS ENDING JUNE 30, 1913 and 1914.

#### GROSS IMPORTS.

Articles and Countries.	Months	Quantities for Twelve Months ending June 30.		Values for Twelve Months ending June 30.	
	1913.	1914.	1913.	1914.	
WOOL, HAIR OF THE CAMEL, GOAT, ALPACA, AND OTHER LIKE ANIMALS, AND MANUFACTURES OF:					
Unmanufactured-					
Class 1 - Clothing (dutiable) -	Pounds.	Pounds.	1		
Imported from— Belgium	266,930	4.581.419	\$62,537	<b>\$1.251.09</b>	
United Klngdom	29,368,707	4,581,419 45,223,714	6,829,223	\$1,251,09 11,764,79	
Argentina	22,603,402	1 30.959.660	4,814,413	6,717,41	
Uruguay	2,657,6.0	7,972,159	615,541.	1,855,55	
Australia and Tasmania	5 619,342	23,757,714	1,515,905	5,909,13	
New Zealand	6,306,×74	4,710,748	1,5 0,098	1,027,38	
Other countries	415,840	7,883,347	85,203	2,156,37	
Total	67,238,715	125,088,761	\$15,422,920	<b>\$</b> 30,681,75	
Class 2 — Combing (dutiable) —					
Imported from—	1.074.440	507 500	*000 100	4110 50	
Turkey in Europe	1,374,446	585,738 12,301,661	\$363,169 3,370,537	\$118,50 3,460,72	
United Kingdom	13,505,151 243,908	4,542,139	53,440	1,043,19	
Canada	1,273,289	739,473	350,629	182,61	
Other countries	489,652	670,687	128,552	101,92	
Total	16,886,446	18,839,698	\$4,266,327	\$4,906,96	
Class 3 - Carpet (dutiable) -		1			
Imported from-					
Russian Empire	25,645,077	22,627,514	\$3,458,426	\$3,702,61	
United Kingdom	20,900.746	22,105,267	3,586,462	4,151,20	
Other Europe	13,484,980 2,337,196	10,505,102 5,452,526	1,973,896 278,016	1,918,24 84r,21	
Argentina	35,926,815	29,884,054	4,721,949	4,428,36	
East Iudies	3,962,811	2,788,130	501,089	458,18	
Turkey in Asia	7,394,257	5,350,091	1,183,294	959,19	
Other countries	1,516,212	3,290,629	187,444	565,58	
Total	111,168,094	102,003,313	\$15,890,576	\$17,029,61	
Total unmanufactured	195,293,255	245,931,772	\$35,579,823	\$52,618,33	
Manufactures of-					
Carpets and carpeting (duti-					
able)—	Sq. Yards.	Sq. lards.			
Imported from—	eq. Iujus.	Sy. Iuras.			
Turkey in Europe	281,927	161,921	\$1,459,823	\$809,93	
United Kingdom	129,769	199,333	496,856	534,233	
Asia	589,573	613,899	2,443,571	2,686,80	
Other countries	84,162	98,724	495,739	421,344	
Total	1,085,431	1,073,877	\$4,895,989	\$4,452,309	

### COMPARATIVE STATEMENT OF IMPORTS OF WOOL. 397

# COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF WOOL, Etc.

#### GROSS IMPORTS. — Continued.

ARTICLES AND COUNTRIES.	Quantities for Twelve Months ending June 30.		Values for Twelve Months ending June 30.	
	1913.	1914.	1913.	1914.
CLOTHS — (dutiable) — Imported from—	Pounds.	Pounds.		
Belgium	545,401	692,575	\$617,599	\$812,390
Germany	941,160	2,779,043	940,906	3,065,855
United Kingdom	2,496,457	7,293,304	2,890,276	7,039,442
Other countries	302,477	1,620,664	439,666	1,876,365
Total	4,285,495	12,385,586	\$4,888,447	\$12,794,048
Dress Goods, Women's and				
CHILDREN'S — (dutiable)— Imported from—	Sq. Yards.	Sq. Yards.		
France	3,198,351	1	\$811,733	\$2,424,269
Germany		1	521,141	1,190,549
United Kiugdom		1	1,943,727	3,033,60
Other countries	144,480	1	45,025	124,794
Total	15,712,155	1	\$3,321,626	\$6,773,209

<sup>1</sup> Quantities not reported.

# COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF WOOL, Etc. — Concluded.

#### EXPORTS OF WOOL AND MANUFACTURES OF.

	Foreign.			
	1913.	1914.	1913.	1914,
ARTICLES.	Quantities.	Quantities.	Values.	Values.
Wool, Ilair of the Camel, Goat, Alpaca, and Other Like Animals, and Manufactures of: Unmanufactured—				
Class 1—Clothing (dutiable), lbs. Class 2—Combing "" Class 3—Carpet "	3,113,052 138,039 1,181,313	303,207 10,356 226,282	\$655,093 30,137 140,917	\$63,635 2,457 29,891
Total unmanufactured	4,432,404	539,845	\$826,147	\$95,988
Wool of the sheep, hair of the camel, and other like animals; Class 1—Clothing (free) lbs. Class 2—Combing ""Class 3—Carpet""		372,583 39,347 109,152		\$80,423 9,486 10,128
Total		521,082		<b>\$</b> 100,037
Hair of the Angora goat, alpaca, and other like animals (dutiable), lbs		80,947		25,10
Total unmanufactured	4,432,404	1,141,874	\$826,147	\$221,12
Manufactures of— Carpets and carpeting, sq. yds. (dutiable)	6,338 39,492	7,246 47,146	\$53,207 35,965	\$14,46 49,90
Lbs. Sq. yds. Wearing apparel (dutlable) Wool wastes, pounds (free) All other (dutlable) Hair of the Angora goat, alpaca.	433,298	94,288 203,512 175,114	72,691 12,451 23,081	78,59 37,80 14,35 58,68 48,58
etc., manufactures of (dutiable)				49,610
Total manufactures of			\$197,395	\$381,99
I	Domestic.			
Wool, AND MANUFACTURES OF: Wearing apparel	27,774,332	26,852,402	\$2,460,326 923,184 1,099,996	\$2,148,23 973,65 1,668,19
Total manufactures			\$4,483,506	\$4,790,083

### WOOL AND MANUFACTURES OF WOOL REMAINING IN BONDED WAREHOUSE JUNE 30, 1913 AND 1914.

	1913.	1914.	1913.	1914.
ARTICLES.	Quantities.	Quantities.	Values.	Values.
Wool, Hair of the Camel, Goat, Alpaca, and Other Like Animals, and Manufactures of:  Unmanufactured — Class 1 — Clothing, lbs	45,484,999 4,212,460 28,489,883 	940,064	\$10,949,960 1,067,022 4,472,796 	
Manufactures of — Carpets and carpeting, sq. yds Cloths, lbs Dress goods, women's and children's: Sq. yds	403,926 939,966 7,020,937	282,247 1,682,214 	326,244	\$732,637 1,611,942 1,103,622 330,177
All other. Hair of the Angora goat, alpaca, etc., manufactures of			488,226	959,946 73,663
Total manufactures of			\$4,354,505	\$4,811,987

<sup>&</sup>lt;sup>1</sup> Not separately reported after December 1, 1913.

QUARTERLY REPORT OF THE BOSTON WOOL MARKET FOR JUNE, JULY, AUGUST, SEPTEMBER, 1914, AND SEPTEMBER, 1913.

Domestic Wools. (George W. Benedict.)

	1914.				1913.									
	June.		Jı	aly	·.	A u	gu	st.	Sept	em	ber.	Sept	en	ibei
HIO, PENNSYLVANIA, AND					-									
WEST VIRGINIA. (WASHED.)														
XX and above	28 3 2				30	29	â		29	g	31	26	a	27
X	26 3 2					28	<u>a</u>	29	28	ā	29	25	a	26
Blood	32 g 3 31 g 3	25				33 33	a	$\frac{34}{33\frac{1}{2}}$	33	a	34 33½	30 30	a	31
1 "	30 <u>@</u> 3	1	31	g	32	31	g	32	31	ĝ	32	30	g	31
Fine Delaine	30 <u>a</u> 3	11/2	31	Ē	32	32	ġ	33	31	à	32	27	g	28
(UNWASHED.)	23 @ 2	4	24	â	25	24	ā	25	24	a	25	20	a	21
Blood	26 g 2	7	27	3	28	28	a	$28\frac{1}{5}$	27	a	28	23	a	24
3 44	26 g 2 25 a 2	7	27 26		28	27 26	Ü	28	26	Û	27	23	a	24
Fine Delaine	25 <u>\$\bar{g}\$</u> 2 26 <u>\$\bar{g}\$</u> 2	7		g	27 28	27	a	$\frac{27}{28}$	26	â	$\frac{26\frac{1}{2}}{27}$	22	à	$\frac{24}{23}$
H., WIS., N.Y., ETC.	3 -	•		٥			3		-	ی			٥	
ASHED.)														
ine	31 g 3	11	31	a.	32	32	ā	33	32	à	33	29	a.	30
**	30 <b>g</b> 3	1	31	(a	32	32	a	$32\frac{1}{2}$	32	ā	$32\frac{1}{2}$	29	â	30
"	29 â 3		30			30	g	31	30	a	31			30
ine Delaine	27 (a 2	8	28 (	(a	29	29	(eī	30	28	C	29	26	a	27
ne	22 <u>B</u> 2	3	23	Û	$23\frac{1}{2}$	23	a	$23\frac{1}{2}$	22	ı	23	19	g	20
Blood	26 @ 2	61	26	Ü	27		9	$27\frac{7}{2}$ $27\frac{7}{2}$	26	â	27	22	a	23
	26 <u>a</u> 2 26 <u>a</u> 2		26	g à	$\frac{27}{26\frac{1}{2}}$	27	a	$\frac{27\frac{1}{2}}{26\frac{1}{2}}$	26	Œ	$\frac{26\frac{1}{2}}{25\frac{1}{2}}$	22	3	$\frac{23}{23}$
e Delaine	24 9 2	5	24	a	25	25	a	26	24	à	25	21	i	22
CKY AND INDIANA.	9 -			_			_			_			_	
VASHED.)	00 5 0	• 1	07	2	oo.	0.7	-	100	07	3	071	0.4	-	95
Blood	26 <u>6</u> 2 26 <u>6</u> 2		$\frac{27}{26}$	a	28 27		g	28 27	25	a	$\frac{27\frac{1}{2}}{26}$			25 25
i	21 8 2	2	22	g	23	22	à		22	ĝ	23			24
RI, IOWA, AND ILL.														
ASHED.)	25 à 2	6	26	ä	97	961	l a	27	- 05	1 🍙	26	99	6	23
lood	25 @ 2 25 @ 2		$\frac{20}{25}$	ä	26	25	a	26	25	2 U.	26	22	â	23
aid	21 a 2	2	21	à	22	21	à	22	21	ġ	22	22	ĝ	23
URED BASIS.) mouths, fine, and fine														
medium	58 @ 6		60	g	61	60		62			60	52	ĝ	53
to 8 months, fine	54 @ 5 50 @ 5		56 52	Ü	57	57 53	a	58 54			$\frac{56}{52}$	46 47		$\frac{47}{48}$
months, medium to 8 months, medium .	50 <u>ā</u> 5 44 <u>ā</u> 4		45	a	53 46	46	a		41		45	41		42
II, fine and fine med	46 g 4	S	47	à	48	48	a	50	46	a	48	43	g	44
medium	42 g 4	3	42	$\tilde{\boldsymbol{g}}$	43	43	a	44	42	û	<b>4</b> 3	38	ä	40
ORNIA. URED BASIS.)														
ee, 12 months	52 @ 5	4	53	à	55	56		57	54	a	55			49
6 to 8 months	46 a 4		47	à	49	48	g	50		ā	48			45
free defective	45 g 4 37 a 4		46 37	<u>a</u>	47 40	47 38	a	48 40	45		46 40	36		
ory Wool: Mon-	37 g 4	10	0,	9	10		9	10	. 00	9			3	-
ma, Wyoming, Utah,									İ					
(daho, Oregon, etc. URED BASIS.)														
iple, fine and fine med.	59 a 6	32	60	ā	62	62	á	63	60	â	62	53	û	54
" medium		4	54	g	55	55	ā	56	53	ā	54	48	ā	49
othing, fine and fine	5.1 % 5	66	55	-	57	56	ä	58	54	ã	56	48	ā	49
medium	54 @ 5 48 a 5		50	a	$\frac{51}{52}$	51		53	50		52	43	ı,	
Mexico. (Spring.)	3 .			-			-			_				
URED BASIS.)	5.0	7	s =	=	50	6.5	-	50	5.5	9	56	15	ë	48
$\begin{bmatrix} 1 & \cdots & 1 & \cdots & 1 \\ 2 & \cdots & \cdots & \cdots & \cdots \end{bmatrix}$	56 g 5 47 <u>â</u> 4	18	57 48	a	58 50	57 48	g	58 50	46	à	56 48		g g	
.3	40 g 4	2	40	a	42	40	a	42	38	à	40	37	à	38
.4	38 <u>a</u> 4	10	38	a	40	38	ĝ	40	35	<u>u</u>	37	34	a	35
GIA AND SOUTHERN.	23 <u>ā</u> 2	1	.)1	ō	25	9.1	a	25	91	ô	25	21	â	22

#### DOMESTIC WOOL.

Boston, September 30, 1914.

The wool market during the months of June, July, August, and September has passed through a period of changes which has given a chance for both the optimist and the pessimist to say "I told you so" with perhaps equal satisfaction.

The early wools arriving in June and early July met with ready sale at remunerative prices and for the most part were bought by manufacturers for immediate consumption. This active market through the spring encouraged dealers to continue buying in the country at advancing prices until the clip was all marketed, with the result that many of the later wools were purchased from the growers on a rather speculative basis, considering prices prevailing in the East.

The opening of the goods market in July was naturally rather slow, owing to the increased competition which manufacturers had to meet from abroad; therefore the wool market took on a waiting attitude with prices well maintained, however.

The breaking out of the European war the latter part of July, a factor which nobody had foreseen, gave rise to much speculation as to what effect it would have on the wool market. The immediate effect was to stimulate activity among the mills, many of which profited by orders which ordinarily would have been placed abroad. This was followed by an increased buying of wool and hardening of values during August, especially as it was supposed that importations of wool would practically be shut off or at least seriously interfered with. It soon became apparent, however, that wools from London could be brought here without much risk and that owing to lack of English and continental demand wools in that market were likely to show a decided decline, especially in the finer grades. As soon as this feature dawned on the trade, buying was immediately curtailed with the result that the month of September has been very quict and the market in favor of the buyer.

All eyes are now focussed on the London sales opening October 6 and by the values then established our future market will be governed to a great extent.

GEORGE W. BENEDICT.

PULLED WOOLS. (W. A. BLANCHARD.)

		1913.			
	June.	July.	August.	September.	September
Extra, and Fine A	55 @ 60	55 @ 60	55 <u>@</u> 60	52 (ā 57	48 @ 54
A Super	50 @ 53	50 @ 53	50 <u>6</u> 53	47 @ 50	44 <u>a</u> 47
	43 @ 47	43 @ 47	43 <u>6</u> 47	42 @ 45	38 <u>ā</u> 40
C Super	35 @ 40	35 <u>a</u> 40	35 @ 40	33 (a) 38	32 <u>a</u> 35
	52 @ 55	52 <u>a</u> 55	52 @ 55	50 (a) 53	43 <u>a</u> 45
Medium Combing Low Combing	45 <u>@</u> 48	45 <u>a</u> 48	45 <u>ā</u> 48	43 @ 46	40 <u>a</u> 42
	40 <u>@</u> 43	40 <u>a</u> 43	40 <u>â</u> 43	38 @ 40	36 <u>a</u> 38

#### REMARKS.

The four months under review have been largely a worsted season and, in consequence, pulled wools, which at this time of the year are not adapted for combing purposes, have not been a feature of the general market. The finer grades have been in demand for broadcloths and similar dress goods, but B lambs, which comprised the bulk of the pullings, have been slow of sale. Owing to the shortage and high cost of skins, however, pullers have held their wools above the views of buyers and transactions have been within narrow limits.

The war in Europe had no appreciable influence on the domestic market during the month of August, but the announcement, early in September, of a resumption of the London sales October 6 had an immediate and disturbing effect on movement and values.

W. A. BLANCHARD.

FOREIGN WOOLS. (MAUGER & AVERY.)

	1914.				1913.					
	Jι	ıne.	J	uly.	Au	gust.	Septemb	er.	Sept	ember
Australian Combing:			-							,
Choice	35	$\bar{a}$ 36	35	ā 36	34	a 35	32 @ 3	3	41	ā 43
Good	34	ā 35	34	g 35	34	a 35	31 @ 3	2	40	â 41
Average	33	ā 34	33	â 34	33	ā 34	30 @ 3		37	$\tilde{g}$ 38
Australian Clothing:		9	1	9			5 -			J -
Choice	34	ā 35	33	@ 34	32	ā 33	31 @ 3	2	41	a 44
Good	33	ā 34	32	$\hat{a}$ 33	31	a 32	30 @ 3	ī	40	â 42
Average	32	@ 33	31	ā 32	30	ā 31	29 @ 3		38	@ 39
Sydney and Queensland:	02	<b>G</b> 00	0.	g 0 <b>2</b>		8 01	20 3		00	G 01
Good Clothing	34	@ 35	33	@ 34	32	ā 33	31 à 3	9	42	a 44
Good Combing	33	@ 34	32	ā 33	31	@ 32	30 3		40	a 43
Australian Crossbred:	90	g or	1 02	<u>u</u> 00	01	@ 02	30 %	-	40	g 40
Choice	33	@ 34	32	ā 33	31	â 32	30 @ 3	1.1	40	ā 43
	29	a 30	28	a 30	27	â 29	26 0		37	ā 39
Average	20	g 00	20	9 00		9 20	20 8		01	5 00
Choice	34	@ 36	34	ā 36	33	@ 35	32 @	1.5	42	@ 45
Good	33	a 34	33	ā 34	32	@ 34	31 @		39	ĝ 40
Good Defective	32	@ 33	32	a 33	31	a 32	29 @		37	a 39
	32	E 20	0.5	g 50	01	u 02	20 (6.	,0	01	g 55
Cape of Good Hope:	29	@ 30	28	a 30	27	@ 29	25 @ 3	7	34	ā 36
Choice	26	å 28	25	ĝ 26	24	ā 26		25	30	ā 33
Montevideo:	40	E 20	20	u 20	-7	g 20	20 6	-0	50	Û 99
Choice	29	$\hat{a}$ 30	28	ā 30	27	@ 29	26 @	28	29	@ 30
	28	a 29	27	ğ 29	26		25 a		28	ā 30
Average	27	a 28	26	g 28	26	a 28	26 g		36	â 38
English Wools:	21	g 20	20	<b>u</b> 20	20	9 20	20 8		. 50	@ 30
Sussex Fleece	31	ā 32	32	$\hat{a}$ 33	32	â 33	32 <b>@</b>	1.5	42	ã 43
Shropshire Hogs	31	a 32	32	a 33	32		33 -a		41	a 43
Yorkshire Hogs	28	ā 30	28	ā 30	28	g 30	28 a		39	g 40
Irish Selected Fleece	28	g 30	28	a 30	1 28	ā 30	29 7	30	39	a 41
Carpet Wools:	20	<u>u</u> 50	-	<u>u</u> 00		3 00	20 0		,,,,	9 71
Scotch Highland, White .	18	â 19	19	a 20	18	£ 20	18 a	20	25	a 26
East India, 1st White Joria	29	ā, 30	30	3, 31	30	â, 31	29 a		33	@ 35
East India, White Kanda.	20	<u>u</u> 00	00	3 01	00	.g 01	20 6	00	00	· G 00
	24	$\hat{a}$ 25	24	ā 26	24	@ 26	23 3	25	29	@ 30
har Donskoi, Washed, White	24	ā 26	24	g 26	24		23 â	25	34	
Aleppo, White	26		26	g 27	26		25 @		26	
China Ball, White	21	a 22	19	a 21	19		19 a		27	@ 28
" No. 1, Open	18	â, 21	18	ā 20	18		18 @		24	ā 27
" No. 2, Open	15	ā 16	14	ā 16	14		14 d		19	

#### FOREIGN WOOLS.

Boston, October 9, 1914.

The demand for foreign wools during June and July was fairly active. and as prices compared favorably with values of domestic wools there was a very good demand and quite a large turnover.

The sudden declaration of war in Europe caused a check to sales in August, but at reduced quotations, and the realization that imports of foreign goods had been stopped by the war, the consumption was again increased and good sized parcels, particularly of crossbred wools, passed into manufacturers' hands.

The feeling was general that wools would be lower when the Colonial wools became available, but there did not appear to be much chance that banking and shipping facilities would be restored to permit of the movement of much wool for a while to the world's markets.

The opening of the London sales on October 6 was awaited with a good deal of interest and some anxiety.

MAUGER & AVERY.

### THE TEXTILE BUREAU.

An office in connection with the work of the Textile Bureau, to prevent the fraudulent undervaluation of imported textile manufactures, has been opened on the sixth floor of the Singer Annex, 95 Liberty Street, New York. Every instance of imported goods sold here at prices that suggest a probability of undervaluation should be immediately reported to the Bureau at the above address.

JOHN P. WOOD,
Director.





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Lonsdale Mfg. Co.	No	No	Potter Knitting Co.	Yes	No
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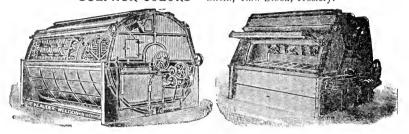
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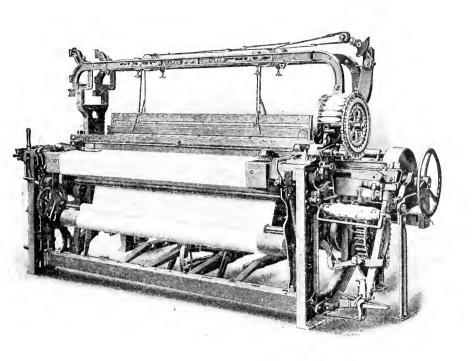
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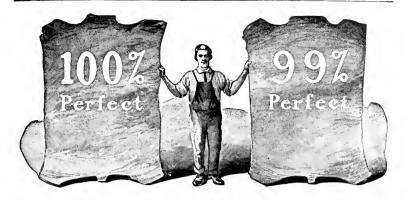
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#### The Service We Render

The goods which we deliver are guaranteed equal to standard. No shipment leaves our warehouse without closest scrutiny. This department of our business has been for years controlled by modern methods. And for those who use our goods we are equipped to render a service unequalled by any American dyestuff Twenty experts in our employ distributor. are at the call of the textile manufacturer and converter. No charge is made for their time and experience. Their headquarters are established at our five American laboratories. Our distribution of technical literature annually mounts into thousands of pamphlets and volumes.

The object of such service is to provide a dyehouse result which will enable the textile man to make a profit on his goods in a competitive market. The dyeing problem is complex. The cost of dyeing per unit of material is only one factor in the problem of successful merchandising. The effectiveness of that dyeing—its success in meeting trade conditions—is a factor even more important. Our customers are successful both as manufacturers and as merchants. Can we render you this service?

#### Cassella Color Company

NEW YORK BOSTON ATLANTA PHILADELPHIA PROVIDENCE MONTREAL





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